Clinical Lecture
ON
THE TREATMENT OF WOUNDS.

Delivered at the Queen's Hospital, Birmingham.

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GENTLEMEN,—Wounds of all kinds must, while you are surgeons, be the objects of your care. The one great question for you to solve will be, how least painfully, how most speedily and most safely, you can assist or promote the natural process of healing.

Teachers, in text-books and hospital wards, differ very widely on the theory and practice of this fundamental part of surgery. I shall not attempt to enumerate their differences, much less either to confute or reconcile them. My present aim is to place before you the evidence of typical cases, in support of what I believe to be the first and essential principles which should govern the practice of surgeons in treating wounds.

I invite your attention to this little old gentleman, who has kindly attended here this morning for your instruction. He consulted me about two months ago for a cystic tumour, about as large as a hen's egg, in the right temporal region. The skin was very red, tense, and painful, and the hat, though a very soft one, was worn with much difficulty. After transfixing the growth vertically through the base, and peeling out the two halves of the cyst, with its bread-sauce-like contents, I dried the interior of the wound with a fine sponge. The edges were then very accurately approximated, and kept so with a few strips of lint soaked in styptic colloid. A few turns of bandage completed the dressing. When I removed it, at the end of five days, there was not a drop of discharge, adhesion was perfect, and afforded a simple but complete illustration of the surgeon's first intention in treating wounds—to secure direct union. All that is visible of the cicatrix is a very fine, pinkish line, extending upwards about two inches from the right ear.

Please to note—firstly, that the wound was thoroughly dried with a fine sponge; secondly, styptic colloid was used to keep the edges in contact; thirdly, the parts were not disturbed until the fifth day, when union was complete and solid.

Drenching wounds with water during an operation, and washing them with it afterwards, are mistakes. Water favours decomposition, which is the enemy of healing action.

The styptic colloid, used to keep the edges of the wound together, is the admirable preparation introduced in 1867 by my friend Dr. B. W. Richardson.* In removing the styptic-colloid dressing common water should be scrupulously avoided, and a mixture of alcohol and ether employed, or equal parts of absolute alcohol and distilled water, warmed to a little above the heat of the body.

It has been noted that the dressing was not touched for five days after the operation. Once divided parts—be they hard or soft, bones or muscles, skin or nerves—are adjusted with a view to union, the less they are disturbed the better.

A case illustrating the same principles, though on a somewhat larger scale, is that of C. H——, aged forty-three, who was lately in Ward 5, whose right breast I removed on the 20th May, with a small hard gland from the corresponding axilla. Of the operation it only need be said that, according to my usual practice, I cut down upon the sternal origin of the great pectoral and dissected it clean, so as to make sure of thorough removal of the diseased mass. I am convinced that many so-called rapid recurrences of cancer are only growths of pieces left behind, and that *thoroughness* is the very essence of success in extirpation of malignant growths. After removal of the breast, the edges of the wound were neatly brought together by numerous points of silver suture, and dressed with a layer of fine cotton wool and over it picked oakum. An evenly compressing bandage was then applied round the chest, and made to include the arm and hand in the flexed position so as to fix them immovably to the side. The first night the temperature rose to 101·3°, but it never rose afterwards above 100°.

The wound was first dressed at the end of the fifth day after the operation. A great part of it being healed by the first intention, a large number of the sutures were removed, and strips of adhesive plaster applied, so as to keep the edges in apposition; a pledget of oakum with a compressing bandage completed the dressing. On June 1st the remaining sutures were removed. The wound was then nearly all healed, and the same dressing applied. On June 3rd (fourteenth day after operation) the entry on the card is "Patient dressed (as before), and sent home well."

The points in this case to which I wish to direct your attention are—(*a*) the numerous sutures; (*b*) the cotton-wool and picked oakum dressing; (*c*) the compressing bandage; (*d*) the rare dressing.

Metallic sutures so very rarely cause any irritation, that they may be inserted very near each other with impunity. Sutures far apart, with gaping intervals, are comparatively useless. If the cut surfaces are to adhere they must be brought into contact and kept there, and for this purpose metallic sutures half an inch apart, or even less, are most efficacious. I often apply intervening strips of lint soaked in styptic colloid, but in this case only placed over the wound a layer of fine cotton-wool, and a pledget of picked oakum. The best cotton-wool for surgical dressings is that sold for jewellers in thin sheets, about eighteen inches by twelve, with alternate layers of tissue-paper.* You will often see claims of priority for cotton-wool dressing. I do not pretend to say who first introduced it, but the credit of generalising its application in the treatment of a great variety of surgical injuries chiefly belongs to Burggraeve, of Ghent.†

It has been recorded that the breast case was only dressed three times, in the fortnight which elapsed between the operation and the patient's discharge, in accordance with the principle of infrequent dressing, of the minimum of disturbance to insure the maximum of rest, dwelt upon in the preceding case, and equally borne out by those to be presently brought to your notice. To the same end the smoothly and lightly compressing bandage round the chest very powerfully contributed. Of all surgical agencies none so beneficent as compression, none requiring more delicate manipulation, none so inadequately appreciated. Under a smooth and uniformly, while lightly compressing bandage, extravasations of blood are absorbed, the healing action is promoted, and a soothing influence is exercised. There must be no constriction—only equable adaptation of surface to surface with the light pressure which always comforts. There must be no squeezing like that of an old College friend's hand when seen after long absence; such pressure as that, if continued, is intolerable constriction. The soothing surgical pressure is like that which you interchange with the hand of a lady, the pleasure of whose meeting is tempered by the respectful regard which she inspires. Your hand adapts itself to hers, and gently presses it wherever it can touch it, but nowhere squeezes it for fear of offending. Such pressure as that, when employed by the surgeon in the treatment of injuries, always soothes and heals.

* Styptic colloid, as prepared after the instructions of Dr. Richardson, F.R.S., by Messrs. Robbins and Co., of Oxford-street, is produced by saturating ether entirely with tannin and a colloidal substance, xyloidine, or gun cotton, a little tincture of benzoin being finally admixed. (Vide Dr. B. W. Richardson in Medical Times and Gazette, 1867, vol. i., p. 393 et seq., "On a new Styptic and Adhesive fluid—Styptic Colloid; and on Healing by the First Intention." Also, by the same author, "On the Science and Art of Healing Wounds," in Transactions of St. Andrews Medical Graduates' Association for 1871, London, 1872, p. 37 et seq.

* It is supplied by S. Jevons, Worcester-street, Birmingham, at 2s. 9d. the lb. parcel.

† Chirurgie Simplifée. Nouveau Système de Pansements Inamovibles. Par le Dr. Burggraeve (avec planches). Bruxelles, 1853. Also, by the same author, Le Génie de la Chirurgie. Gand, 1853, p. 36, et seq.

To apply a nicely compressing bandage well, you must practise hundreds and hundreds of times, bearing in mind that in surgical, as in all art, the greatest results are often obtainable from the simplest means, provided they be employed with the skill which can only result from the most patient assiduity.

These principles are illustrated by the two patients who have undergone amputations, and who are now before you.

I amputated the middle finger of this man's right hand in the course of my clinical lecture last week. As the result of old injury, the finger was bent and stiff, so as to be in the way. I therefore removed it at the metacarpo-phalangeal articulation, being careful not to wound the palm, and including in the elliptical incision so much of the covering of the phalanx as to admit of easy closure of the wound over the big knuckle. The edges were united by three points of silver suture, a fine drainage-tube placed in the lower angle of the wound, which was covered with a pledget of picked oakum; a moist pasteboard splint was now bandaged to the palmar aspect of the limb from the tips of the fingers to the elbow, and the forearm suspended in a sling.

This other patient, aged sixteen, was admitted to Ward 3, the 18th May ult., with his forearm crushed by machinery to within two inches of the elbow. As the bones were not split into the joint I amputated just below it, utilising some of the least damaged skin to cover it. Where the skin was quite sound the edges were brought together with two points of suture, elsewhere the parts were approximated with strips of lint soaked in styptic colloid, a drainage-tube being left in the lower part of the wound. The stump was covered with a layer of cotton-wool and oakum, and rectangular pasteboard splints were applied with gentle pressure to ensure perfect immobility and prevent swelling. When the apparatus was opened four days afterwards there was very slight sloughing of the margin of one flap, but the stump was of good colour and healthy temperature, without tension. The same dry dressing with pressure was applied, and the lad was discharged on the 17th of June, a month within a day from his admission, the stump, then quite healed, having been dressed altogether seven times after the amputation.

A parallel case is that of James B——, aged six, discharged the other day from Ward 6. The soft parts of his left lower limb had been extensively crushed by a waggon, and an attempt had been made to save the limb. Sloughing and profuse suppuration had been followed by such exhaustion that the lad might fairly be said to be moribund when I amputated the thigh in the upper third on the 22nd of April. I dressed with cotton-wool, oakum, pasteboard splints, and nicely compressing bandages, and the lad was discharged with a sound stump and in good health on the 15th of June. In the forty-seven days which elapsed from the operation to his leaving the hospital the dressing was only renewed six times.

Not to go over the ground already trodden in commenting on the other cases, I shall only remark on the splints and the drainage-tubes employed in these amputations.

Coaptation of divided surfaces once effected, absolute rest is the first essential to the healing process. That rest is best secured, in the case of amputations, by moulding to the stump well-softened pasteboard splints, and fixing them with evenly compressing bandages. As in the case of fractures, the joint above the injury should be included in the splints, and great contributory benefit may be derived from the nice adaptation of sandbags.

Of Chassaignac's drainage-tubes in the treatment of wounds it is impossible to speak too highly; but useful as they are after amputations, removal of tumours, and such-like operations, it is in such cases as this breast that their advantages are perhaps most conspicuous.

When this woman was before you last week, her pale, drawn face betokened suffering and exhaustion; the big, pendulous, and exquisitely tender left breast discharged matter through half a dozen openings, the result of post-partum mammary abscesses and linseed poultices. I passed a long probe from the lower aperture on the outer side, under the mammary gland, obliquely upwards and inwards, out at the uppermost aperture near the sternum. A ligature secured to the eye of the probe enabled me to carry a good-sized drainage-tube along its track, and I left it there with both ends depending, covering the breast with a good pledget of dry oakum, and suspending and compressing it with an evenly compressing bandage. The poor woman was easy at once, her appetite improved, and she slept well. When the dressing was removed, after a lapse of four days, the breast was soft and much diminished in size; the openings other than those traversed by the drainage-tube were healing rapidly, and the woman is now cheerful and rapidly convalescent.

Here is an equally successful case of a different kind, yet illustrating substantially the same general principles which should guide you in the treatment of all wounds. This youth is the son of one of our principal ivory and bone turners, who, while practising the other day with a fine circular saw, nearly cut off the soft pad at the end of the right thumb. He did not consult me until the third day, when the little flap was swollen, the wound dirty, the whole thumb throbbing and being very painful. On compressing the radial joint above the wrist, the throbbing and pain ceased, and I taught my patient how to obtain the relief by effecting the compression himself with the left thumb. I then brought the edges of the wound together with narrow strips of emplastrum elemi, leaving slight intervals for the escape of matter, covered the end of the thumb with a little fine picked oakum, bandaged it so as to effect gentle uniform compression, and supported the hand at an acute angle with the arm, by means of a sling supporting the forearm and enclosing the elbow, as every sling, to be efficient, should do. Relief was immediate; the dressing was not touched for four days, and only twice afterwards, at intervals of three days. You see the thumb very nearly a match for its fellow, and a linear cicatrix is all that is left of the ugly wound.

This case illustrates, like the previous ones, the advantages of direct compression, with dry and rare dressings, in the treatment of wounds, and it further exemplifies the benefits to be derived from digital compression in the treatment of inflammation of the limbs.*

In proof of the statement that the same principles of treatment are applicable, whether the wounded parts be soft or hard, skin, bones, or muscles, or all combined, you have here two very striking cases. This carter (see figure) was brought into the accident ward with the scalp

torn from the greater part of the right side of the head, and with two compound and depressed fractures in the parietal and frontal bones respectively. The large flap was

* Observations on the Treatment of Inflammation by Digital Compression, by Dr. Tito Vanzetti. On Treatment of Fractures of the Limbs, by Sampson Gamgee; London, Churchill, 1871; p. 108, et seq.

cleansed, replaced, and united by eight points of suture, picked oakum and a light bandage applied, and an ice-bag over all. The greater part of the wound united by the first intention. The cicatrix is now quite solid, and the man is doing his usual laborious work without ache or pain.

The last case which I shall now bring before you is that of a porter on the Midland Railway, who was brought to the hospital, a distance of fourteen miles, with the left femur literally smashed just above the knee-joint, a fully-laden coal-truck having gone over the limb. The soft parts were extensively torn, but both tibials pulsated, and I felt justified in the attempt to save the limb. Reduction effected and the edges of the wound approximated, a large drainage-tube was passed into it, and a pledget of lint, soaked in styptic colloid, placed over it. The limb was now accurately encased in a pasteboard apparatus from the crest of the ilium to the toes. The apparatus was not opened for ten days, and once a week afterwards. The man barely limps in walking, and is now doing duty as a signal-man at Selby-cut. One and all these cases illustrate my favourite maxim, that REST, POSITION, and PRESSURE are the trinity of healing surgical graces.

THE EFFECT OF PROLONGED MUSCULAR EXERCISE UPON THE URINE IN RELATION TO THE SOURCE OF MUSCULAR POWER.

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(*Continued from p. 850.*)

FROM all these considerations, then, even allowing a large margin for any error in the principle of calculation, the evidence points in unmistakable language to the utter impossibility of the power manifested by muscular action being due to the oxidation of muscular tissue. Traube has gone so far as to invert the doctrine of Liebig, and to contend that in the performance of muscular work non-nitrogenous substances alone are consumed. The metamorphosis of the organised constituents of a muscle, he asserts, is neither involved in nor increased by its action. In this proposition, however, it may be premised that we are carried beyond what is true, for the results before us show an increased elimination of nitrogen during the performance of muscular exercise apart from the influence of food. It is not, indeed, surprising, looking at the increased activity of the circulation and respiration, that there should be an increased metamorphosis of nitrogenous matter throughout the system, and therefore an increased wear and tear of the muscles as a part of the general action occurring. The oxidation of nitrogenous, like that of non-nitrogenous matter, furnishes, it must be remembered, a source of force, for, after the separation of its nitrogen as urea, an oxidisable residue remains; but this has no intrinsic association with the view which ascribes the source of muscular power to the direct oxidation of muscular tissue.

Dr. Flint, from his observations upon Weston in America, has arrived at a diametrically opposite conclusion from that which I have endorsed. He says: "If these facts be accepted, and, leaving the widest margin for inaccuracy in the estimates, they cannot involve any considerable error, it is impossible to come to any other conclusion than that excessive and prolonged muscular exertion increases enormously the excretion of nitrogen, and that the excess of nitrogen discharged is due to an increased disassimilation of the muscular substance."*

Dr. Flint's observations were conducted upon a pedestrian feat of five consecutive days' duration, in which a distance of 317¼ miles was walked. An investigation was made, extending over five days before, the five days during, and five days after, the walk. The results summarised are:—

—	Nitrogen ingested.	Nitrogen eliminated as urea.	Nitrogen eliminated in urea and fæces combined.
	Grains.	Grains.	Grains.
Before the walk.			
First 24 hours ...	361·22	303·37	323·26
Second " ...	288·35	275·50	301·18
Third " ...	272·27	304·77	330·36
Fourth " ...	335·01	283·52	300·57
Fifth " ...	440·43	298·73	320·06
Average for the five days	339·46	293·18	315·09
During the walk.			
First 24 hours ...	151·55	331·33	357·10
Second " ...	265·92	328·00	370·64
Third " ...	228·61	397·58	397·58
Fourth " ...	144·70	321·52	348·53
Fifth " ...	383·04	306·61	332·77
Average for the five days	234·76	337·01	361·52
After the walk.			
First 24 hours ...	385·65	276·84	295·70
Second " ...	499·10	334·27	358·81
Third " ...	394·83	358·68	400·87
Fourth " ...	641·71	347·35	382·89
Fifth " ...	283·35	378·69	418·49
Average for the five days	440·93	339·17	373·15

It will be seen that Dr. Flint has taken account of the nitrogen contained in the fæces, and reckoned this in the nitrogen eliminated. He has left out of consideration in this estimate the nitrogen of the uric acid. The uric acid in Flint's analytical results, however, is so small as scarcely to be worthy of note, and there is reason to believe that the quantity fails to be correctly represented. Upon one occasion it amounted only to 0·14 grain for the twenty-four hours, and for the most part ranged under 3 grains, once only rising as high as 9·21 grains. The estimation was effected, we are told, by "concentrating the urine, treating it with nitric acid for twelve hours, and collecting and weighing the crystals." As I shall subsequently show, when describing the analytical processes adopted in obtaining my own results, the nitric is an objectionable acid for use, as it fails to give as large an amount of crystalline deposit as is yielded by the hydrochloric; and moreover the period of twelve hours allowed is insufficient for the complete separation of the uric acid. This I only allude to in passing to account for the great discordancy which may be wondered at as existing between the amounts of uric acid obtained by Dr. Flint and myself. Under any circumstances the amount is not sufficient to affect the deduction concerning the source of muscular power.

Dr. Flint mainly grounds his argument upon the relation between the nitrogen ingested and that eliminated. He says, "During the walk of 317¼ miles in five consecutive days, for every 100 parts of nitrogen taken in with the food, there were discharged in the urea and fæces 174·81 parts, against 95·53 parts per 100 for the five days before the walk, and 91·93 parts per 100 for the five days after the walk."

There is in these figures considerable error, based upon a wrong principle of calculation having been adopted. He gives the daily relation of nitrogen eliminated to 100 parts ingested, and estimates from these the average relation for the respective five-day periods. Clearly, to give a correct representation, he should have taken the total nitrogen ingested and eliminated during the five days of the periods, and have drawn the relation for the period from these figures instead of framing the average from the separate daily relations.

During the five days before the walk, the total nitrogen ingested amounted to 1697·28 grains, and that eliminated in the urea and fæces to 1575·43 grains. These figures give to every 100 parts of nitrogen ingested 92·82 parts

* On the Physiological Effects of Severe and Protracted Muscular Exercise. Reprinted from the "New York Medical Journal" for June, 1871, p. 78.

eliminated, instead of 95·53 as under Flint's mode of calculation.

During the five days of the walk the nitrogen ingested amounted to 1173·82 grains, and that eliminated to 1806·62 grains. The relation here is for every 100 parts of nitrogen ingested, 153·90 parts eliminated, instead of 174·81 as given by Flint.

During the five days after the walk, there were 2204·64 grains of nitrogen ingested, and 1865·76 grains eliminated. The correct relation is 100 to 84·64, instead of Flint's 91·93.

If we take an imaginary illustration, the force of what I have said may be rendered strikingly apparent. Suppose during one day there should be 200 grains of nitrogen ingested and 50 eliminated: the relation stands as 100 to 25. Suppose during another day there should be 50 grains ingested and 200 eliminated: the relation existing is 100 to 400. Now, if we draw the average relation for the two days from the daily relations (as has been done by Dr. Flint), we should have to say that during the two days, for every 100 parts of nitrogen ingested there were 212·5 parts eliminated; whereas, there being 250 grains ingested and 250 eliminated during the two days, the relation for the period is as 100 to 100.

The correction I have made in the figures diminishes the relative excess in the nitrogen eliminated during the period of the walk, and thus detracts to a corresponding extent from the force of Flint's argument. But I fail to see that this way of viewing the matter in reality proves anything in favour of muscular work involving the disintegration of muscular tissue. There are two factors to be dealt with—namely, the ingested nitrogen on the one hand, and the eliminated nitrogen on the other. An alteration of either will immediately affect the relation presented. Now, on looking at Flint's results, what is especially noticeable is a shortcoming in the ingested nitrogen during the walk; and it is especially to this cause, and not an increased elimination, that the difference in the relation is due. There is, indeed, no very material variation in the egested nitrogen for the respective periods; and surely, if muscular work took its source from the oxidation of muscular tissue, we ought to have a strongly marked difference. Extracting the average for the periods from the summarised results previously furnished, and representing the nitrogen in the urea alone, and that in the urea and fæces combined, the amounts stand thus:—

—	Nitrogen ingested.	Nitrogen in urea.	Nitrogen in urea and fæces combined.
	Grains.	Grains.	Grains.
Five days before the walk	339·46	293·18	315·09
Five days of the walk...	234·76	337·01	361·52
Five days after the walk	440·93	339·17	373·15

The position taken by Dr. Flint assumes that there should be a fixed relation between the ingested and egested nitrogen in the absence of the performance of muscular work. This holds good, it may be said, to a certain extent; but, apart from the influence of muscular work, it must also be said that the relation may undergo a most marked variation. To give an illustration I may refer to the results obtained under my own observation, where a person under ordinary conditions as regards exercise passed from a mixed to a purely non-nitrogenous diet. During seventeen hours of May 5th, whilst upon mixed food, the urea eliminated represented 197 grains of nitrogen. During twenty-three hours of May 6th, when only non-nitrogenous food, consisting of arrowroot, sugar, and butter, was taken, the nitrogen in the urea voided amounted to 187 grains; and for the twenty-four hours of the following day, the diet still consisting of non-nitrogenous food, it amounted to 136 grains. Results such as these show how the relation may be altered through the medium of the ingesta; and it is to be remarked that it is especially by the diminution of the ingested nitrogen during the period of the walk in Flint's observations that the egested nitrogen is brought into relative excess, for the amount of variation in the latter is not of sufficient magnitude to produce any material influence.

It does not appear to me necessary to look to the disintegration of muscular tissue in particular to account for an increased elimination of nitrogen during prolonged muscular exercise. There is increased bodily action altogether, and with this it may be considered only reasonable to expect that there should be an increased activity in the disintegration of nitrogenous matter throughout the system.

Before leaving this subject, I may remark that the quantity of nitrogen ingested and egested by Weston during his walking performances is shown to have been much greater in England than in America. It was only during his forty-eight hours' walk that the ingested nitrogen stood low. During the longer walks he partook of more substantial food, and consumed a considerable quantity of meat, an article above all others leading to a large introduction of nitrogen.

The last two columns in the general table (*vide* THE LANCET, pp. 816–17) show the average results for the days of rest as compared with those for the days of walking, and there are several points of interest in connexion with the figures furnished.

It is seen that the quantity of urine passed does not present any wide difference, being 59·89 fluid ounces for the days of rest, and 63·76 fluid ounces for the days of walking.

The specific gravity stands at 1023·71, against 1029·6.

The acidity of the urine was greatly increased by the muscular exercise. During the period of rest the average free acidity was equivalent to 22·26 grains of oxalic acid per diem, whilst during the walk it rose to considerably more than double, or 56·74 grains. Muscular exercise, therefore, according to these results, materially augments the free acidity of the urine.

The average daily amount of urea during rest was 637·48 grains, against 1111·36 grains during walking. These figures stand in the ratio of 1 to 1·743. In Dr. Flint's observations the average daily elimination for the ten days of rest was 677·51 grains, against 722·16 grains for the five days of walking, giving a ratio of 1 to 1·065.

In the case of uric acid the amount was 21·93 grains per diem during rest, against 28·23 grains per diem during walking, the ratio being as 1 to 1·287. I have already referred to the deviation as regards uric acid presented by Flint's results. His figures show an average elimination of only 1·84 grains per diem for the ten days of rest, and 2·99 grains per diem for the five days of walking.

In opposition to the general effect, the amount of chlorine was much lessened by the conditions existing during walking. For the period of rest the daily average stands at 100·09 grains, whilst it is only 47·90 grains for the periods of walking, the ratio being as 1 to ·478.

The sulphuric acid shows a considerable amount of alteration, the figures yielded being 50·05 grains per diem for the period of rest, against 76·09 grains per diem for the periods of walking, and the ratio standing at 1 to 1·520. In Flint's observations the daily average for the ten days of rest was 45·29 grains, and that for the five days of walking 53·50 grains, affording a ratio of 1 to 1·181.

Phosphoric acid exhibits a still greater variation. For the days of rest we have 43·74 grains per diem, and for those of walking 86·83 grains per diem. These figures give a ratio of 1 to 1·985. 44·51 grains per diem is the amount given by Flint's results for the periods of rest, and 76·62 grains per diem for that of walking, showing a ratio of 1 to 1·721.

As sulphur and phosphorus enter into the composition of the chief nitrogenous principles, and as urea with sulphuric and phosphoric acids constitute products of the disintegration and oxidation of these principles in the system, it seemed to me a point of interest to determine the relation existing between the amounts of urea and the acids respectively eliminated. The results show that the acids do not move in the same manner as urea, for whilst the ratio of urea to sulphuric acid during rest is as 1 to ·0785, during walking it stands as 1 to ·0684; and in the case of phosphoric acid the ratio during rest is as 1 to ·0686, and during walking as 1 to ·0781. The sulphuric acid was thus increased to a less, and the phosphoric acid to a greater extent than the urea by the effect of the muscular exercise.

As with chlorine, although not to the same extent, the amount of soda eliminated was less during walking than during rest. The daily average during rest was 85·56 grains, and during the walk 70·33 grains. These figures give a ratio of 1 to ·822.

Flint's analyses only afford information about the

sulphuric and phosphoric acids and chloride of sodium amongst the inorganic constituents of the urine. I am therefore precluded from following any further the relation between our results, but I notice that the chloride of sodium in his observations moved in the same direction as the chlorine and sodium in mine—that is, was less during walking than during rest. For the ten days of rest the daily average was 235·92 grains, and for the five days of walking 65·08 grains.

Potash was eliminated more largely during walking than during rest. The daily average for the latter period was 54·25 grains, and for the former 77·26 grains. The ratio furnished by these figures is 1 to 1·424.

Lime also showed a similar deviation, although eliminated in each case to a much smaller extent. The daily average for this base during rest was 4·13 grains, and during walking 6·44 grains. The ratio given is 1 to 1·559.

Magnesia exhibited scarcely any alteration, there being a daily average elimination of 2·79 grains during rest, and 2·76 grains during walking. The ratio presented is 1 to ·989.

To tabulate the urinary principles and compare the elimination during rest and walking, the relation stands as follows, expressing the amount for the former period as unity:—

	Rest.	Walking.
Urea	1	1·743
Uric acid	1	1·287
Chlorine	1	·478
Sulphuric acid	1	1·520
Phosphoric acid	1	1·985
Soda	1	·822
Potash	1	1·424
Lime	1	1·559
Magnesia	1	·989

The theoretical deduction to be drawn from the investigation which has been conducted is, that although the elimination of urinary nitrogen is increased by muscular exercise, yet the increase is nothing nearly sufficient to give countenance to the proposition that the source of the power manifested in muscular action is due to the oxidation of muscular tissue.

There is a practical deduction likewise to be drawn, and this, I think, possesses a considerable amount of importance. For the maintenance of the body in a proper state the ingoing must be equal to the outgoing—in other words, according to the consumption and elimination of material so should be the supply that is furnished. Now, the results show that nitrogenous matter is consumed in the system in larger quantity during exercise than during rest, and we may take it, therefore, that its supply should be made to coincide. Whatever view we may adopt about the source of muscular power, it stands to reason that when there is an extra consumption of nitrogenous matter going on there should also be an extra supply in order that the proper balance may be maintained. Although it is probably true that the non-nitrogenous principles yield their latent force in part to the evolution of muscular power, yet the teaching of observation tends to show that something more than food holding a preponderance of the non-nitrogenous principles is required to sustain the body under severe exercise; and this teaching, it may be said, corresponds with the promptings of our instinctive inclination. Animal food is best adapted for replacing nitrogenous matter when an extra waste is going on, and meat and cheese, by common consent, are looked upon as more largely required by those undertaking prolonged and arduous work than by those leading a comparatively inactive life.

But besides the elimination of nitrogenous matter being increased, it is noticeable that there is also a marked increase in the mineral ingredients of the urine. All, except chlorine and soda, and associated with these magnesia, show evidence of decided augmentation, but none so much so as phosphoric acid. Indeed, no principle, whether inorganic or organic, is influenced so extensively as this latter. Mineral matter undoubtedly must be looked upon as playing an essential part in the economy of life, and an increased elimination naturally implies that an increased supply is demanded. Now it happens, as with nitrogenous matter, that nothing meets this extra demand so adequately as animal food; and again we have an argument suggesting its special serviceableness during the performance of muscular work.

To complete these communications, I will give an account of the processes of analysis applied to the urine.

(To be continued.)

REPORT OF A

CASE OF ELEPHANTIASIS SCROTI,

WITH SUCCESSFUL OPERATION.

BY STAFF-SURGEON GODFREY GOODMAN, R.N.

(Communicated by the DIRECTOR-GENERAL OF THE MEDICAL DEPARTMENT OF THE NAVY.*)*

IN August, 1874, while at Levuka, Fiji, in H.M.S. *Dido*, I was asked to see a native who was suffering from elephantiasis scroti, with a view of having the case operated on. The man, by name Domash, a native of Fiji, from the island of Gora, was about forty-five years of age, and, though thin and slight, was of healthy appearance, and had a good appetite. He had come from his own island to Levuka, to see if he could have anything done for him, as he suffered great inconvenience from the weight of the tumour, this preventing him from moving about, and causing him considerable pain in back and loins. The tumour, which was pear-shaped, extended to within about three inches of his ankles. Its greatest circumference was a little above the base, and measured about forty inches; its narrowest portion at the perineum, at which point it was about eight inches transversely, and four in an antero-posterior direction; this was when the man was standing up. The tumour itself presented a solid brawny feel to the touch, except at one or two points near its base, where a sense of fluctuation could be detected. The skin on the surface of the growth was smooth and regular, but could not be easily pinched up off the underlying areolar tissue. The penis was considerably retracted, but about two inches of the prepuce, including glans, was external to the tumour. His left leg, as high as the knee, was also the subject of this disease, and it had also commenced to attack the right ankle. The disease had existed for years, but the exact time could not be well ascertained.

After a careful examination, I determined to remove the tumour, having first explained the danger to the patient through an interpreter. He expressed himself as willing to run any risk, and was most anxious to have the operation performed without delay. It was arranged that he was to be kept some days in hospital in order to regulate his diet, and to make more accurate observations with regard to his state of health. Unfortunately, on the night of August 4th, while sleeping by the fire, the tumour came in contact with some live coals, and before he was aware of the occurrence, an extensive and deep burn was inflicted on its surface. This determined me on operating at once, and assisted by Dr. Cruickshank, and Dr. Goode, surgeon of the *Dido*, on the morning of August 5th I had the patient placed on a table under one of the beams in the ward. To this beam a light table was fastened. The tumour was carefully bandaged and enveloped in a piece of strong calico, which was sewn over it. To this the hook of the tackle was made fast, and by this means the whole mass was hoisted up so as to drain it of blood. The tumour was kept in this position for about half an hour. The patient was then put under chloroform. I had had previously manufactured on board by the blacksmith an iron clamp thirteen inches long, with screws six inches long, passing through the ends of the blades, by which means they could be brought forcibly together. When the patient was fully under the influence of chloroform, the clamp was applied round the neck of the tumour close to the perineum. Before this was done, the penis was drawn forcibly forwards and upwards towards the abdomen, and the blades were then screwed tightly together. The mass was then lowered down and held horizontally by an assistant. Standing on the left side of the patient, with a large scalpel I made a semilunar incision across the front of the tumour, commencing at the left side, about an inch in front of the clamp, carrying the knife about two inches forward, and terminating the incision on the opposite side, at a corresponding point to where it was commenced. This

incision was from an inch and a half to two inches deep, dividing the integument, thickened areolar tissue, &c., which formed the wall of the tumour. When these tissues were divided, the interior of the mass was found to consist of large cells containing yellowish fluid. The cell-walls were thick, and resembled those that are seen in large hydatid cysts. The testicles were found lying in the centre of this substance; the outline of their tunics could not be traced; they appeared enlarged and in a diseased state. Fearing they would act as foreign bodies, and interfere with the subsequent healing of the wound, the vessels were tied, and they were removed. A large quantity of blood flowed from the wound, but it came principally from the distal side of the venous sinuses, which were very large, and, from the brawny nature of the substance in which they were embedded, remained patulous after division. Before proceeding further, all the vessels that could be observed were at once tied. When these were secured, a long amputating knife was passed across from one angle of the first incision to the other, and the whole tumour removed with one sweep of the knife, a similar flap to the anterior being formed. The vessels in this flap were also tied, and as much as possible of the watery cysts and loose tissue between the flaps was removed with the knife. The faces of the thickened walls of the tumour, where they were divided, were painted over with strong carbolic acid, an ordinary paint-brush being used for the purpose. The surfaces between the flaps, where the loose cysts had been dissected out, were freely sponged with a strong solution of the same. The clamp was then gradually unscrewed, and, as no further bleeding took place, it was removed at once. The edges of the wound were brought together by several points of interrupted suture; these were composed of carbolised silk. The wound was covered with lint soaked in carbolic-acid lotion; this was covered with oiled silk, and the whole secured with a T bandage.

The patient was kept completely anæsthetised throughout the operation, which took about twenty-five minutes. On recovering from the effects of the chloroform, a small quantity of brandy was administered, and he was removed to bed. When asked to move, he put both hands under him to raise himself, as he was in the habit of doing, and expressed great surprise and pleasure at the ease with which he was able to do so.

The tumour, after removal, weighed 42 lb., without taking into consideration the weight of the fluids which escaped, to the extent of some pints, during the operation, and from the mass after its removal and before it was weighed.

The patient slept well that afternoon and the night after the operation, and on the following day was cheerful, and complained of little or no pain. I had now to leave Levuka, as my ship was proceeding to one of the other islands in the group.

This case progressed very favourably. I was subsequently informed by Dr. Cruickshank, under whose care the patient was left, that there was little or no suppuration, and that nearly all the wound healed by first intention. When healed, the stump was about the size of a small drinking basin. The man returned to his island about the middle of September, with the wound quite healed, and expressing himself well pleased with the result of the operation.

ON THE

PROBABLE RELATIONSHIP OF SYPHILIS, SCROFULA, TUBERCLE, CANCER, AND OTHER ALLIED MORBID CONDITIONS.*

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CONSIDERING the extent and importance of the subject, it will be anticipated that what I have to say must of necessity be of a very fragmentary nature. And although it is impossible to prove the connexion, of which there is a certain amount of evidence, it is a subject pregnant with material for thought, speculation, and, it may be, discovery.

Without attempting in the slightest degree to dogmatise, I would venture to suggest that syphilis has a substantial share in the production of these morbid conditions. Whatever may be the actual relationship, it is quite certain that, to say the least, they have many points of resemblance. If we study their pathology carefully, I think it may be fairly stated that, in all, some portion of the lymphatic system is greatly at fault. And here it will be well to consider briefly the arrangement and distribution of this system. It includes the lymphatic glands, follicles, vessels, capillaries, and "serous canaliculi" described by Recklinghausen. These lymphatics pervade the whole body, being more numerous in those localities where there is the largest quantity of nutritive fluid circulating, consequently where there is the greatest functional activity. They are especially abundant in—(*a*) the mucous membranes, particularly about the lips, mouth, nose, glans penis, anus, and vagina; (*b*) the visceral layer of serous membranes; (*c*) the lungs and liver; (*d*) the ductless glands, comprising the spleen, thyroid, thymus, and supra-renal capsules; (*e*) the vessels of the brain and cord, which are surrounded by lymphatic sheaths.

In the first place we will compare *syphilis* and *scrofula*. Without enumerating the various conditions found in either state, do they not attack almost identically the same portions of the body? Hydrocephalus often appears with hereditary syphilis. Sometimes hydrocephalus attacks one member of a family and syphilis another. Rosen mentions a cases of hereditary syphilis in a girl, eleven years old, who had suppuration of glands and caries of bones. Many foreign authorities of high standing in the profession do not hesitate to pronounce many scrofulous diseases in children as the result of syphilis in the parents—e.g., Hey, Hufeland, Mahon, Bertin, &c.; and it is very probable that observations in this direction are conducted with greater facility abroad than in this country. Baumés relates instances in which syphilis in the parents was followed by hydrocephalus, caries about the knee joint, phthisis, and glandular swellings in different members of the family. Syphilitic parents have been known to produce children some of whom were syphilitic, others scrofulous, others healthy.

In both diseases, whatever be the explanation, there is a tendency to phthisis, although much stronger in scrofula. From comparatively recent investigations made on animals by Drs. Burdon-Sanderson and Wilson Fox, it appears that a "something," indistinguishable histologically from what is generally understood as "tubercle," can be produced artificially by irritation of the lymphatics. And so in syphilis, when there has been undoubted irritation of the lymphatics, it is not uncommon to meet with a very similar condition in various parts of the body.

Glandular enlargement used to be considered pathognomonic of scrofula (before so much attention was bestowed on lymphadenoma); and yet Dr. Wilks says, "In the lymphatic glands, especially those of the neck, we have now long been in the habit of looking for signs of constitutional syphilis." Mr. Hutchinson says, "Syphilis, in all its stages, produces special and wholly peculiar lesions; and although these may *easily* be mistaken for struma, they have in reality nothing whatever to do with that state of constitution." I believe they may *very easily* be mistaken, and in some cases the diagnosis is decided by the result of our inquiries into the history of the patient. If there is any suspicion of syphilis, we have to do with a syphilitic affection; if not, a scrofulous one. It must be remembered that although pemphigus is peculiarly a syphilitic disease when occurring in infancy, it certainly does not always present the colour which usually belongs to syphilitic eruptions.

Another mark of syphilitic eruptions which does not always hold good is, that they do not itch. I have now under my care two indubitable cases of syphilis in which there is great itching present. Dr. Wilks relates the case of a boy whom he considered scrofulous; but after some time he treated him with mercurial inunction and iodide of potassium, and because he rapidly recovered the case was regarded as syphilitic. Here it was quite certain that the lesion would answer to the description of either disease, the diagnosis being ultimately settled by that most fallacious of all tests, treatment. It cannot be said that the connexion between syphilis, lupus, keratitis, and scrofula can be altogether ignored at present, until we have more numerous and reliable statistics regarding the history of such cases.

Although Mr. Hutchinson and others see in syphilis a

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great resemblance to the exanthemata, it appears to me that it has many more points of resemblance with scrofula as regards lesions, pathology, and treatment.

Secondly. Is there any intimate relationship between syphilis and cancer? I have seen two or three cases of extensive ulceration about the female genitals. One was syphilitic, and I believe another was epitheliomatous; I do not remember the third. As far as outward appearance went, there was no notable difference, but I did not examine by the aid of the microscope. Out of this arises the following question—viz., Is it possible in every case, at any stage of the disease, to distinguish syphilitic ulceration, rodent ulcer, and epithelioma, in certain situations? Although Mr. Erichsen does not suggest that syphilis has anything to do with the production of cancer, he says that he knows of no greater resemblance than that which syphilis bears to cancer. We have no direct evidence of syphilis being the cause of cancer; at the same time, both these diseases are closely allied to other members of this group, and hence probably to one another.

Thirdly. Many now grant that "tubercle"—i.e., lymphatic overgrowth—is only a variety of scrofula. Wilks considers it a secondary form of scrofula.

Fourthly. Cancer and tubercle appear to be nearly related, for the following reasons:—(1) They not unfrequently attack members of the same family, but not the same individuals. (2) Cancerous and tubercular peritonitis are in some cases indistinguishable; so it is with cancer and tubercle of the lymphatic glands. (3) The rare event (related by Paget in his Lectures on Surgical Pathology) of arrest and almost complete recovery from scirrhus of the mamma connected with the evolution of tuberculous disease. De Morgan considers this indicative of an antagonism between the two diseases. Mr. Bryant mentions a case in which he removed a cancerous breast; the patient recovered with a healthy cicatrix, but died eighteen months afterwards of phthisis. The supposed antagonism between tubercle and cancer may be simply a kind of counter-irritant or derivative action, so that scirrhus of the breast might arrest in this manner the tuberculising process of lung-tissue in its vicinity, or *vice versâ*. Certain it is, in many cases of phthisis, glandular enlargement appears to act as a safety-valve, and thus suppresses, retards, or diminishes the activity of the pulmonary disease. (4) Sir James Paget describes some tumours as mixtures of cancerous and tubercular masses, and he affirms that the microscope will ensure a diagnosis, which appears somewhat doubtful in the present day.

Fifthly. Primary cancer of the lymphatic glands is not to be distinguished from lymphadenomatous glands. Wilks calls it lymphoid cancer. *Lymphadenoma* in its typical form is said to be general hypertrophy of the lymphatic glands, accompanied usually with enlargement of liver and spleen. Sometimes both are enlarged, sometimes one, sometimes the other, sometimes neither the one nor the other. Trousseau says that in three only out of eleven cases which came under his care was there *any* enlargement of liver or spleen. *Leucocythæmia* is probably the same disease, for, like the former, it may be accompanied with splenic enlargement, when it is called "splenic," or with lymphatic glandular enlargement, when it is called "lymphatic leucocythæmia." On referring to the variously-named cases detailed at the Clinical Society of London, on the 24th ult., it appears to me that they differed only in name. I would merely call attention to one or two points. In Dr. Gowers' case we have albuminous urine, hard fibrous or caseating glands, lardaceous degeneration of spleen and caseous infarctions, general lymphatic overgrowth. Dr. Greenfield relates a case of lymphadenoma with an increase in number of white corpuscles; at the same time he says the number of corpuscles (pale) is not large enough for true leucocythæmia. And, further, he thinks this case is not true lymphadenoma; hence he recommends another name for this intermediate disease—viz., "anæmia lymphatica." Dr. Goodhart details a case which he suggests may be lymphadenoma, or leucocythæmia splenica, or a mixture of both diseases. Is it not natural to inquire whether there is necessity for so many names in cases so similar? Is the diagnosis of leucocythæmia to rest on the *number* of pale corpuscles in the blood? I would ask, What is the proportion of pale corpuscles to red ones in a normal state? Some authors say one to forty, others one to four hundred. If there be such a wide difference in what is considered healthy blood, it would be desirable to know the proportion of the pale to the red ones in typical leucocythæmia. Is it no longer typhoid fever because the rose-coloured spots are too numerous, not numerous enough, or altogether absent? Certainly, if new diseases are to be formed on such data as these, a fresh list might be issued daily from all parts of the country. *Addison's disease* is very like the diseases just mentioned, especially as it is frequently connected with tuberculous degeneration of the supra-renal capsules, which are very like lymphatic glands, and abundantly supplied with lymphatics.

Sixthly. And, further, *tubercle* and *lymphadenoma* must be very intimately associated. In most of Dr. Hodgkin's cases related in the Medical and Chirurgical Society's Transactions for 1832 there was tubercle in lungs, liver, or spleen, and in some of the enlarged glands caseous degeneration had commenced, which Dr. Hodgkin considered a mere coincidence. Caseous degeneration of an enlarged gland has been regarded as a positive proof of the scrofulous nature of the disease, but really it seems to me to be a mark of the great and intimate relationship between scrofula, tubercle, leucocythæmia, and lymphadenoma. Trousseau says that many cases of lymphadenoma seem to arise from, or at any rate follow, long-continued irritation—e.g., ozæna, &c. It is well known that albuminoid infiltration of viscera follows long-continued irritating discharges. I have at the present time under my care in the Bradford Infirmary a girl who has had hip-joint disease for eight years, and who now has immense enlargement of the spleen and liver, great excess of pale corpuscles in the blood, and albuminous urine. Moreover, she has had hæmoptysis and diarrhœa. In the twentieth volume of the Pathological Transactions Dr. Murchison records a case of a man having a phthisical history, in whom, after death, were found enlarged glands, great thickening of the submucous coat of the duodenum (1¼ in.), tuberculous bodies in the liver and kidneys, and peritonitis. The Committee on Morbid Growths did not venture to give a name to this state of things. In the same volume Dr. Moxon reports a case of lympho-sarcoma of the cervical glands associated with tubercles in the pleura, and he is obliged to confess that the change was closely allied to, if not identical with, scrofula.

Seventhly. In syphilis, scrofula, tubercle, and rickets, it is very common to meet with what is known as lardaceous or albuminoid degeneration of the viscera; and sometimes this occurs in leucocythæmia. We are told by Dr. Wilks that the jelly-like translucent material met with in this condition is very nearly allied to that found in colloid cancer, if not in some instances identical with it. Oppolzer calls albuminoid liver colloid liver. Moreover, scrofula and rickets frequently occur in the children of parents who are scrofulous, syphilitic, cancerous, or tuberculous. However, the same morbid conditions sometimes become apparent in the children of very aged or too nearly related parents.

(To be concluded.)

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

LONDON HOSPITAL.

FEMORAL HERNIA STRANGULATED SIX DAYS; PETIT'S OPERATION; RECOVERY.

(Under the care of Mr. RIVINGTON.)

ANNIE W——, aged forty-four, was admitted on March 9th, 1876, at about 2 P.M. She stated that she had a fall about six years ago, and ruptured herself, but did not notice much of a lump in her groin for two years later, when it was about the size of a walnut. She had had no advice, but had suffered periodical attacks of pain in the part, with vomiting, during which the swelling got larger. These

symptoms usually subsided spontaneously in a few hours. On Thursday, March 2nd, she had a return of the usual pain. Her bowels had been relaxed for two or three days, and whilst she was at stool she strained a great deal. Almost immediately after the straining the pain became more severe, and the lump in her groin increased in size. For the week previous to her admission she was in continual pain, and vomited night and day.

On admission she had a strangulated femoral hernia on the left side about the size of a walnut. There was no impulse on coughing. She was in a depressed state, with a feeble, rapid pulse. She drank some milk, and retained it, but sickness supervened about an hour afterwards. At 5.30 she was taken to the operating theatre. Chloroform was given by Mr. Allden, the house-surgeon. An incision was made on the inner side of the tumour through skin and fascia. The fascia propria was divided and the sac exposed. Gimbernat's ligament was divided, and the contents of the sac, evidently consisting of a knuckle of bowel with omentum, was reduced. No vessel required ligature. The edges of the wound were brought together at the upper part, a pad and bandage were applied, and the patient sent to bed. The whole of the proceedings were completed in about ten minutes. The stricture was caused by Gimbernat's ligament. The sac was much congested, and in a critical, but not gangrenous, condition.

After the operation the condition of the patient improved, the pulse becoming fuller and less frequent; no more vomiting. As the bowels had not acted, on the 12th an enema was administered, and brought away the contents of the rectum. On the 13th the bowels acted three times. There is nothing specially to be noted about the progress of the case, except that the wound healed very slowly, and, as might have been anticipated from the length of time during which the hernia was strangulated and the patient deprived of food, convalescence was protracted. The patient was, therefore, in the hospital till May 12th, when she was discharged with a well-fitting truss adapted to the femoral aperture.

SALISBURY INFIRMARY.

CASE OF COLUMNAR EPITHELIOMA OF THE OVARIES WITH ASCITES; REMOVAL OF BOTH OVARIES; RECOVERY.

(Under the care of Mr. WILLIAM M. COATES.)

FOR the following notes we are indebted to Mr. Harcourt Coates, M.R.C.S.

C. B——, aged forty-three, married, of dark complexion and healthy appearance, was admitted June 26th, 1876. With the exception of frequent but slight hepatic derangements, she had enjoyed good health, and her labours, three in number, had always been tedious, but natural. Catamenia regular. No history of cancer in the family. Twelve months before admission she began to fail in health, and four months afterwards her abdomen commenced to swell, and increased in size until it became larger than that of a woman at her full period of pregnancy. There was no swelling of the lower extremities. At this stage Mr. Willcox, of Warminster, who had attended the patient, consulted Mr. Coates on June 26th, 1876. The abdomen was then much distended, patient complaining of great weight when she was erect, and of pressure on the thoracic viscera when recumbent. The shape of the swelling was very like that of ascites. There was evident superficial fluctuation over the lower two-thirds of the abdomen and in both flanks. There was dulness in front from an inch below the umbilicus to the pubes and in the left flank. Above the umbilicus there was exaggerated resonance. The umbilicus was prominent. On examination by the vagina and rectum, the uterus was anteverted, and a firm solid mass was found between the rectum and uterus; the latter organ being abnormally immovable. Alteratives, diuretics, careful diet, and rest were ordered.

July 1st.—No improvement having resulted from the treatment, Mr. Coates, assisted by Mr. Willcox, tapped the abdomen, and drew off about two gallons of amber-coloured limpid fluid, thereby giving immense relief. The abdomen was examined immediately, and the liver was found of normal size and consistence. A little below and to the left side of the umbilicus, a solid mass, slightly movable, apparently about the size of two fists, was discovered. The patient went home on July 7th, and was told to return if the abdomen refilled. She was also informed that an operation of a serious character, which would necessarily be partly explorative, was the only chance of affording her permanent relief.

August 5th.—The patient returned, bent upon having the operation performed immediately, but, as she was on the eve of menstruating, the operation was postponed until August 16th. On this day Mr. Coates, assisted by Mr. Willcox, Dr. F. Coates, and Mr. Biggs, who administered bichloride of methylene, and by two excellent trained nurses from the Salisbury Diocesan Nurses' Home, made an incision five inches in length along the linea alba, from an inch below the umbilicus to a point two inches above the pubes, and exposed the peritoneum. A small opening was then made in this membrane, and some clear, straw-coloured fluid allowed to escape, and, when the opening was enlarged to the full extent of the external incision, a large quantity of ascitic fluid drained away. With the hand passed into the pelvic cavity, two tumours, each larger than a fist, were found in contact with the bladder and the fundus of the uterus. The consistence of the tumours varied, some portions being very soft, while others were as firm as a healthy pancreas.

The tumours were composed of many portions, some being firmly united to each other, others being so soft that one, the size of a walnut, came away when gently handled. Each tumour had loose attachments, which could be easily broken down, to parts around, but the right was firmly attached to the omentum. Both were also attached to the fundus of the uterus by a narrow pedicle. The omentum was clamped about two inches above the adhesion to the right ovary with an instrument devised by Mr. Coates for clamping hæmorrhoids. The slight adhesions to the sides of the pelvis were broken down by the hand. The pedicles, which were narrow and of fair length, were secured by Mr. Spencer Wells's clamps. They were then cut through, and crystallised perchloride of iron applied; but when the clamps were brought outside of the wound such profuse hæmorrhage occurred that the pedicles were at once tied in two parts with carbolised catgut, cleansed, and dropped into the cavity of the pelvis. The omentum, previously clamped, was cut through, tied with Chinese silk, and returned into the abdomen. The pelvis being carefully sponged out, the wound was accurately closed with three deep and three superficial silk sutures, the walls of the abdomen being supported in the manner recommended by Mr. Spencer Wells. The pulse and respiration were normal during the operation, which lasted an hour.

Vomiting came on nine hours after the operation, and lasted forty-eight hours. During this period she was fed by the rectum, taking in this way two ounces of beef-tea, half an ounce of brandy, and a grain of powdered opium every two hours. The nurse was directed to withhold the latter ingredient if the patient slept, and had no abdominal pain.

There was considerable tympanites for a few days, which was relieved when excessive by passing into the rectum an elastic tube three inches long, through which an immense quantity of flatus escaped. The nurse drew off the urine by the catheter every three hours. There was some pain during the first week after the operation, chiefly in the abdomen. The pulse was 120; temperature 101·3°. Hypodermic injections of morphia were given to relieve pain.

August 21st.—Smart diarrhœa occurred, and was stopped by grain doses of powdered opium.

The deep stitches were removed on the third day, the superficial on the sixth. The wound united by the first intention.

30th.—On this, the fourteenth day after the operation, all pain and tympanites had disappeared, and she described herself as "quite well."

Sept. 2nd.—On examining per vaginam a soft mass was found between the uterus and rectum. This Mr. Coates believed to be a traumatic hæmatocele in the pouch of peritoneum, between the rectum and uterus, caused by some slight oozing of blood after the operation. This had completely disappeared by the 13th of September.

Immediately after the operation a serious discharge oozed from the vagina, continued for a fortnight, and then ceased. Her last menstruation occurred on the 6th of

August, and lasted until the 11th. There has been no menstruation since the operation.

Patient made a complete recovery, and returned home.

Microscopical appearance of tumours.—Mr. A. P. Gould, surgical registrar of University College Hospital, kindly examined the tumours, and reported as follows:—"The growth consists of a soft fibrous tissue, raised into papillæ on the surface, many of the papillæ being compound. These papillæ are also covered with a single layer of columnar epithelium. The stroma is very vascular; in one field of the microscope many large vessels are seen cut across, having very thin walls. The papillæ show a tendency to adhere by the apices, and so enclose spaces which become cysts lined with columnar epithelium."

In commenting on this case, Mr. Coates stated that he could not recollect another case in which columnar epithelioma of both ovaries had been successfully removed. The question was, whether an operation fraught with so much immediate danger would have been justifiable if the malignant nature of the disease had been known beforehand? Mr. Coates believed it would, since many cases of malignant tumours do not recur after complete removal. He referred to some cases of cancer—one of scirrhus of breast, one of soft cancer of testicle, one of soft cancer of breast, and one of cancerous deposit in the axilla—in which he had operated, in the first case thirty years ago, and in the others more than fifteen years ago, and in which cases he has had the opportunity of knowing that there has been no return of the disease. He agreed that in this case the patient has at least obtained complete temporary relief, at the expense, it is true, of great immediate danger, but with the possibility also that the disease may not return. Mr. Coates further remarked that although he had originally intended to follow Mr. Spencer Wells's plan of using clamps, he was driven, by the hæmorrhage which occurred when the clamps were brought outside, to ligature both pedicles and return them into the abdomen. As the ligatures produced so little, if any, irritation he would in any future case use a catgut ligature, with a strong impression of its advantages over the clamps.

NEWCASTLE-UPON-TYNE INFIRMARY.

CASE OF CERVICO-OCCIPITAL NEURALGIA.

(Under the care of Dr. G. H. PHILIPSON.)

WILLIAM P——, aged forty-six, married, a carman, was admitted as an in-patient Aug. 3rd, 1876. He stated that for eighteen months he had suffered severe pain in his head, and that during that period of time he had been under the care of several medical gentlemen, and had been unable to follow his occupation. At the outset there had been numbness more than real pain; latterly he had never been actually free from pain, and suffered constantly, at times much more than at others, when the least touch would drive him almost "wild," and it was an "agony" to him even to brush his hair. The pain was increased by exposure, and was worse at night. When asked precisely as to the position of the pain, he placed his finger on the occiput, nearly on a level with the pinna of the ear. When pressure was made at the situation denoted, the suffering was intense and distressing. If anything, the pain appeared to be more severe on the right side. In the paroxysms the pain darted from the occiput to the upper part of the back of the neck, anteriorly to the face, and occasionally downward to the shoulder. Upon carefully testing the sensibility of the surface, the right side of the head was found to be less sensitive than the left. He was a strong, robust man, and was well nourished. He admitted that he had suffered from syphilis twenty years ago, for which he had been mercurialised.

The case was regarded as one of cervico-occipital neuralgia, the nervus occipitalis major being the nerve more especially influenced. This diagnosis was come to from the position of the pain, from the patient's complaining of a continuous dull pain, associated with attacks of very severe lancinating pain, shooting in various directions, and from the well-defined tender spots (points douloureux), corresponding to the spot where the nervus occipitalis minor perforates the complexus muscle and becomes subcutaneous. When questioned respecting the treatment that had been employed, he produced prescriptions for quinine, arsenic, perchloride of iron, carbonate of iron, perchloride of mercury, iodide of potassium, bromide of potassium; and stated that the croton oil liniment and several fly blisters had been applied, that a seton had been inserted in the nape of the neck and had been allowed to remain for three months, that galvanisation had been employed daily for two months, and that he had been an inmate of the Prudhoe Memorial Convalescent Home for six weeks, during which time he had had the warm sea-water baths three times each week. Excepting when he was taking the iodide of potassium, he had not experienced any relief. In his own words, "the pain was becoming worse instead of better." After taking the iodide of potassium for about two weeks it had to be discontinued in consequence of the nasal irritation, the heat and pain at the epigastrium, the vomiting, and the feverishness which it occasioned.

Upon reviewing the treatment that had been employed, and regarding the syphilitic history, especially the nocturnal exacerbations of the pain, it was determined to select a nervine remedy that had not yet been administered, and with this view the bromide of ammonium was chosen and was commenced in doses of twenty grains in the infusion of quassia three times a day.

Aug. 12th.—The pain was still very severe. The bromide of ammonium was increased to thirty grains, and the ointment of veratria was ordered to be rubbed in around the tender points night and morning.

19th.—The pain was still agonising. The bromide was increased to forty grains, and the veratria inunction was continued.

26th.—The paroxysms of pain were excessive. Considering that no relief had been obtained by the administration of the bromide of ammonium for three weeks, regarding the syphilitic history as of importance, and looking upon the anæsthesia of the right side of the face as explicable upon the supposition that the transmission of the nervous impression was lessened by swelling of the nerve from serous effusion, the consequence of neuritic congestion, the possibility of good being effected by absorbent remedies was favourably entertained; consequently five grains of the iodide of sodium, in combination with twenty grains of the bromide of sodium in an infusion of quassia, was prescribed in the place of the bromide of ammonium, and the veratria inunction was discontinued.

Sept. 2nd.—The patient expressed himself as much easier, and stated that during the last two days there had been more soreness than actual pain. The iodide of sodium was increased to seven grains, and the bromide of sodium to twenty-five grains.

9th.—The pain was much diminished. The iodide was increased to ten grains, and the bromide to thirty grains.

16th.—For the last three days has been almost free from pain. The iodide was increased to twelve grains, and the bromide to thirty-five grains.

23rd.—Now no pain. No tenderness at occiput. No painful spots. The iodide was increased to fifteen grains, and the bromide to forty grains.

30th.—Has experienced no pain or tenderness for the past two weeks. Of his own accord, asked permission to return to his home to resume his occupation, which was granted.

The chief points of interest in this case are comprised in the etiology and treatment.

The usual predisposing cause of neuralgic anæmia was absent, while, on the contrary, the patient was full-blooded and strong.

The clear history of syphilis was important. But there was no local lesion, such as exostosis, periostitis, or nodes, or any evidence of an organic change of the nervous centres or of the osseous structures, traceable to this constitutional condition. In the absence of such, the probability of the neuralgia being dependent upon neuritis was strengthened. It is perfectly inexplicable, however, why a very circumscribed nerve-tract was alone influenced.

Upon the hypothesis of the presence of neuritis, remedies possessing an alterative and an absorbent action were selected. The salts of sodium were preferred to those of potassium on account of the previous non-toleration of the iodide of potassium, and of the less alkalising effect upon the blood of sodium, and so depressing to the system generally in a smaller degree. For the previous iodism a very

gradual augmentation of the dose of the iodide of sodium was necessitated.

Associating the symptoms with the rapidity and the completeness of the recovery, it is fair to infer that the neuralgia was dependent upon neuritis, and not upon organic anatomical change.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

THE ordinary meeting of this Society took place on the 19th inst., the president, Mr. G. Pollock, in the chair. An interesting instance of transposition of viscera in the living subject was brought forward by Dr. Lees, and gave rise to some discussion upon left-handedness. Among other specimens Dr. Ord showed a number of calculi from the urinary bladder, which had evidently undergone spontaneous fracture.

Dr. Griffith and Mr. F. G. Nicholson were elected members of the Society.

Mr. BUTLIN read the Report of the Committee on Morbid Growths upon Dr. Walter's specimen of Scirrhus of the Diaphragm (*v.* p. 685). The cancer was found to be distributed on both serous surfaces of the diaphragm, especially the peritoneal, and, from the slight implication of the muscular fibres, it was thought probable that the cancer was of the nature of a secondary infiltration, the primary seat of the disease being undiscovered. The report was signed by Mr. Butlin and Dr. Goodhart.

Dr. LEES brought forward an interesting living example of Transposition of the Viscera. The subject of this malformation was a fair-haired, delicate-looking, and intelligent boy, eight years of age, who came amongst Dr. Lees' outpatients at the Hospital for Sick Children, suffering from weakness and some wasting, but no definite organic disease. The apex of the heart impinged in the nipple-line on the right side; the cardiac dulness extended leftwards as far as the middle of the sternum; and the area of hepatic dulness on the left side reached from the fifth intercostal space to the costal margin. Below the costal margin on the right side there was stomach resonance, and a small but ill-defined area of dulness over the tenth rib on this side pointed probably to the presence of the spleen in this situation. The right testicle was slightly lower than the left, and the lad was right-handed. Dr. Lees referred to six published cases, in two only of which was the malposition noticed during life. — Dr. GREEN inquired whether the duration of life was at all affected by such abnormality. — Dr. DOUGLAS POWELL referred to a case which he had seen some years ago; it was that of a boy fourteen years old, who was not suffering from any special illness, and probably still living. He did not see any reason why the subjects of such malposition of viscera should not live as long as other people, and mentioned a case in an adult recorded by Dr. Hare. When his own case occurred he had consulted the literature of the subject, and had not found that left handedness was commonly met with. As a rule the right testicle is lower than the left, and the transposition of viscera is complete; but the spleen, in many of the cases examined after death, has been found to be subdivided; and in the cases observed during life, as in Dr. Lees' case, its area of dulness is not well defined. — Dr. PEARSON IRVINE had recently made a post-mortem examination on an infant eleven days old, in whom all the viscera were transposed with anatomical precision. The liver and spleen exhibited a transposition of their respective notches, so that the large lobe of the former occupied the left side. All the organs were healthy. The infant had died from the administration of gin and aniseed. — Mr. WAGSTAFFE inquired whether, in the cases examined after death, the relative positions of the great vessels in the neck were also changed, so as to affect the more direct blood-supply to one-half of the brain rather than the other —an explanation which has been advanced for right-handedness. A few years ago the theory of natural selection had been used to explain the fact of right-handedness in individuals; but it was found that the more frequent use of the right fore-limb occurred in some animals, in which the arguments applied to the case of man would not hold—viz., such reasons as the protection afforded by the use of the right hand in warding off blows directed to the left side of the chest.—Dr. ORD inquired whether in these cases there might not be also some transposition in the nerve-trunks or in the decussation of nerve-fibres which could explain the predominant use of the right or left hand.—Dr. IRVINE added that the innominate artery was transposed in his case. The condition of the brain precluded examination of its vessels. — Dr. GREENFIELD did not think altered distribution of vessels could account for the individual being right- or left-handed, because in the latter case the vessels had been observed to have their normal disposition. In a case of a left-handed individual he had examined, embolism of the *right* middle cerebral artery had been followed by aphasia. — Dr. LEES quoted the cases referred to by him as showing that transposition of the viscera was not incompatible with long life. In two of the cases abnormalities were also observed in the pulmonary vessels. — Dr. PYE-SMITH added that the present case afforded further ground for rejecting the view propounded by Hyrtl, that the difference between right- and left-handedness depended upon complete transposition of the viscera.

Mr. C HEATH introduced the patient brought before the Society in November, 1875, from whom he had removed, for epithelioma, the entire tongue, with a portion of the lower jaw, muscles, and glands, in September of that year. There was evidently no recurrence of the disease.

Dr. COUPLAND showed, for Mr. Balding, a specimen of Recurrent Tumour of the Sciatic Nerve, with Secondary Growth in the Mediastinum and Left Pleura. The primary tumour shown at the Society last session, and reported on by the Morbid Growths Committee, was excised on the 21st of July, 1874; its removal being followed by paralysis and œdema of the leg, and a sloughing sore on the heel. The wound on the thigh healed, and the man's general condition improved, but recurrence of the growth followed in the cicatrix. Death took place two years and a half after the operation, after the general health had been failing for six months, and the patient had suffered from a cough for some time. At the post-mortem examination the left pleural cavity was found to be occupied by a large fleshy tumour; the lung being compressed and carnified. There was also infiltration of the costal pleura. In the thigh, the stump of the divided sciatic nerve was the seat of a firm encapsuled growth, spindle-shaped, six inches in length and nine inches in circumference at its thickest part. A small swelling occurred also in the internal popliteal nerve, and scattered over the surface of the body were several cutaneous nodules. There was no implication of the lymphatic glands of the limb or any of the abdominal viscera in the disease.—Mr. D. B BALDING mentioned that the mother of this patient was the subject of an enormous tumour at the back of the neck, springing from the hairy scalp and reaching as low as the nates. It must have weighed twenty-eight or thirty pounds, and had existed for twenty-five years. The patient refused any operative interference. She died eventually from cancer of the breast.

Dr. COUPLAND showed a specimen of Biliary Calculi encysted in Peritoneal Adhesions, which had formed between the liver and gall-bladder and the duodenum and stomach. The calculi were minute, and the gall-bladder itself was filled with similar calculi closely packed together. The patient had died from the effects of a cranial tumour, and was not known to have suffered from any hepatic symptoms. The specimen illustrated the fact that calculi, if of small size, can escape from the gall-bladder or ducts without necessarily exciting fatal peritonitis or finding their way into contiguous viscera.

Dr. GOODHART exhibited for Mr. Lewis Marshall a specimen of Aneurism of the Abdominal Aorta immediately beneath the pillars of the diaphragm. The patient had suffered for two years from radiating pain in the back and pain down the left leg. A bruit could be heard, and the disease was diagnosed two months before death, which took place from rupture of the sac into the left pleural cavity.

Dr. W. M. ORD showed some curious specimens illustrative of Spontaneous Fracture of Vesical Calculi. The calculi were passed by a patient upwards of eighty years of age. Many were irregular in form and evidently segmental fragments of larger spheres. They were composed of uric acid deposited in layers around a central nucleus, which had escaped from the broken calculi, whilst each was coated by a thin layer of urate of ammonia, suggesting an alkaline change in the urine shortly previous to the fracture. The peculiar fracture was apparently due to the swelling and disruption of the contained nucleus, similar to the explosion of a shell, but there were no symptoms indicating this, nor was there any history pointing to the fractures being produced by the crushing together of several calculi. The hypothesis of disruption of calculi by swelling within was suggested by the late Mr. Southam, and a specimen contained in the Royal College of Surgeons' Museum shows a similar condition.

Dr. ORD further showed five Calculi composed of carbonate of lime, three small specimens from the human subject, which had formed probably in the prostate or in cysts or diverticula out of the path of the urine. They were composed of two parts of carbonate to one of phosphate of lime. The two other calculi were from the horse—one, softer, from the bladder, the other from the kidney. In the former the earthy matter was in the form of spheres and cystals, and in the latter laminated. — Mr. WAGSTAFFE, referring to a specimen of reputed carbonate of lime calculus exhibited by him some years ago, said that he had referred it for further examination to the Chemical Committee, as doubt had been expressed as to its composition.

Mr. PEARCE GOULD exhibited a specimen of Disease of the Tricuspid and Mitral Valves from a female forty-two years of age, under the care of Dr. Ringer, at University College Hospital. Symptoms dated from two years, and on admission she presented presystolic and systolic murmurs, and thrill at the left apex, a systolic murmur at the right apex, and diastolic murmur at the base. Her condition improved three times under treatment with digitalis. The heart, especially its right side, was much enlarged, and the segments of the tricuspid valve adherent, leaving an aperture admitting only the tip of the little finger. There was even more marked stenosis of the mitral orifice, which was reduced to a mere chink between the thickened and shortened valve segments.

Mr. GOULD further showed a specimen illustrating Recovery after Pyo-pericardium. The patient was a male, forty-six years of age, who for ten years had suffered from pericardial pain on stooping, but there was no history pointing to pericarditis. The cardiac dulness was normal, the apex beat half an inch below the left nipple; no bruit. On examination the pericardium contained a large collection of dark-grey chalky material enclosed within calcified plates. The apex of the heart was free; valves natural.—Dr. GOODHART mentioned a case shown by him last year, in which similar calcareous material in the pericardium was due to a degenerated hydatid cyst. He was puzzled to know how a heart covered with calcareous plates managed to contract.

Dr. GREENFIELD exhibited a recent specimen of Diphtheritic False Membrane, remarking that fresh microscopical sections of the membrane with subjacent structures were rarely obtained. The specimen showed that the membrane was formed by accumulated and altered epithelial cells, between which and the catarrhal cells there were various transitions. The specimen supported Wagner's views, and showed that diphtheritic membrane of the pharynx and other parts covered by stratified epithelium does not necessarily involve the deeper layers of the mucous membrane.—Dr. BARLOW, in a recent case, saw patches of membrane apparently covering the mucous glands of the fauces, and it appeared as if the diphtheritic exudation, like catarrhal, started from the glandular structures. In a case of membranous ophthalmia recently seen by him, the origin of the disease in the neighbourhood of the Meibomian glands was clear.

Dr. MAHOMED exhibited two specimens of Adenoma of the Liver. The first was from a patient under the care of Dr. Handfield Jones, who died from the effects of aneurism of the right ventricle. The liver weighed 3 lb., and was markedly nutmeggy in appearance. In the centre of the middle lobe was an encapsuled growth subdivided by fibrous trabeculæ supporting cells, resembling liver-cells, but without any orderly arrangement. There were but few blood-vessels and no bile-ducts in the new growth, which in appearance contrasted strongly with the surrounding liver-tissue. The second specimen was from a soldier twenty-eight years of age, under the care of Surgeon-major Trotter. The patient had contracted syphilis nine years before, and died with chronic jaundice and dropsy; the former having lasted for more than six months. The liver weighed 4½ lb., and was studded with medullary-looking growths, the minute structure of which showed tubes formed by fibrous tissue and lined by columnar epithelium. The specimen belonged evidently to cases of multiple adenomata or cylindrical epithelioma, of which cases had been brought before the Society by Drs. Whipham and Greenfield. Dr. Mahomed thought examples of adenoma hepatis could be classed in three divisions; the first comprising circumscribed growths of normal liver-tissue; the second of liver-cells, but no bile-ducts nor interlobular veins; and the third, the multiple columnar-celled tumours, which, unlike the two other classes, led frequently to secondary deposits in other organs.—On the suggestion of Dr. Greenfield, the first specimen was referred to the Morbid Growths Committee.

The Society then adjourned.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting on Wednesday, December 6th (Dr. Priestley, President, in the chair), Dr. WILTSHIRE exhibited two children, both of whom were idiots. Both were first children, and both boys. In the first case the mother had been three days in labour, but was delivered without the aid of instruments or ergot. There was a perfectly healthy family history. The idiocy seemed due to prolonged parturition. In the second case there was a history of a long and difficult labour. Craniotomy was performed in a subsequent lying-in, and induction of labour, with turning, on the third occasion. Both the children exhibited were microcephalic.

Dr. ROUSSEL, of Geneva, demonstrated on the living subject the application of his apparatus for Direct Transfusion from Vein to Vein. The object of it was to prevent coagulation of the blood that was drawn, and to avoid the necessity of defibrination. The apparatus was constructed entirely of hardened pure caoutchouc, which has no influence on the blood. It consisted in principle of Higginson's syringe, with numerous ingenious devices such as have been recently described in the various journals. Dr. Roussel stated that he had operated in over fifty cases. Eight or ten ounces of blood were generally sufficient. Marked interest was shown in the demonstration.—The PRESIDENT congratulated Dr. Roussel on the perfection of his instrument, and conveyed to him the thanks of the Society for his instructive demonstration.

Dr. GALABIN read the notes of a case of Cæsarean Section, and showed a specimen of the uterus and the adjoining parts where the whole circumference of the cervix was the seat of malignant degeneration. A lengthy history of the case was read. Both mother and child were lost.

Dr. BARNES exhibited a Uterus with Extreme Hypertrophic Elongation of the Cervix. The specimen was from a woman who had died after premature labour. The os externum had protruded beyond the vulva, with complete eversion of the vagina. The patient died of pyæmia, connected possibly with the injuries sustained during the labour by the abnormal state of the canal the child had to pass through. The specimen was another illustration of this form of dystocbia, which was described in the Obstetrical Transactions for 1874 by Dr. Roper.

Dr. ROPER exhibited a Fœtus, born at the seventh month, which lived for half an hour. The right thigh was entirely wanting, the left leg below the knee terminated in a spike. Both thumbs were absent, as were also apparently the radii of both arms.

Dr. ROGERS, in reference to Dr. Galabin's specimen, again alluded to the cases he had seen recover where no sutures in the uterus had been used.—Dr. BARNES urged caution in accepting the conclusion that Dr. Rogers's statement pointed

to. The bare facts that in certain cases the uterus had been stitched up and death followed, whilst in certain other cases no sutures were used and recovery followed, did not warrant the inference that the sutures had anything to do with the result. Cases that did not require sutures were those in which the uterus closed naturally by contraction. These cases were just those which were most likely to recover. On the other hand, the cases that required stitching were those in which no contractile power existed, and were therefore cases which were likely to prove fatal under any mode of treatment.—Dr. ROUTH asked how long the wound in the uterus had been kept open before it was closed. In Dr. Edmunds's case three-quarters of an hour was allowed, the uterus being irritated all the while by the fingers until firm contraction ensued, and then no ligatures were needed.—Dr. GALABIN, in reply, stated that iron had been applied when death from hæmorrhage seemed imminent. Only a small amount of watery fluid was found in the peritoneal cavity post mortem.

Dr. J. LANGDON DOWN read a most interesting paper "On the Obstetrical Aspects of Idiocy." His observations extended over eighteen years, and included over 2000 cases. Primogeniture seemed to play an important part, no less than 24 per cent. of all the idiot children observed being primiparous. No doubt this may largely be attributed to the exalted emotional life of the mother, not forgetting the anxiety inseparable from marriage of the male parent, but increased difficulties in parturition seemed to be an important factor. Suspended animation occurred in no less than 20 per cent., and apparently exerted much influence in the production of idiocy. As to the effect of instruments, in only 3 per cent. of the cases had forceps been employed. Prolonged labour was more compromising to the life prospects of the child than a judicious and timely application of the forceps. Only 2 per cent. of the last thousand cases were twins. A very potential cause in the production of idiocy was the physical health of the mother during gestation, especially prolonged sickness, fright, intense anxiety, and great emotional excitement. A marked preponderance in the number of male over female idiots existed—more than twice as many,—due probably to the larger size of the cranium giving rise to prolonged and difficult parturition, continued pressure, and suspended animation, as well as the greater tendency to infantile convulsions among male children. The data for judging of the influence of ergot during parturition were not sufficiently full and reliable to enable any deduction to be made. The diagnosis and prognosis of idiocy were then entered into, *developmental* being distinguished from those of *accidental* origin; congenital idiocy was more amenable to training than post-congenital, an ill-developed brain being more hopeful to deal with than a damaged brain. The prognosis being inversely as the child was comely, fair to look upon and winsome.—Dr. F. C. CORY remarked that in a practice extending over twenty-five years he had noticed no ill-effect upon the intellect of the child from the employment of ergot during labour.—Dr. J. BRAXTON HICKS thought the paper most interesting and of exceeding importance, not merely collaterally, but strictly to obstetricians, and thought they were much indebted to the author for his contribution.—Dr. BARNES said they were importing into their Transactions and discussions new elements or aspects of obstetric practice. He regarded the paper as an able statement of a very interesting question by one thoroughly competent to deal with the question. He considered much further investigation and cross-examination were required before we could accept the conclusions pointed out that obstructed labour attended by suspended animation of the child was an important cause of idiocy. His own experience included many such cases, but he could not call to mind any facts to show that idiocy was traceable to obstructed labour. Dr. Little, in a paper read before the Society some years since, had advanced similar opinions to those advocated by Dr. Down.—The PRESIDENT thought suspended animation must not be regarded too exclusively as produced either, on the one hand, by the pressure of a too prolonged labour, or, on the other, by the compression of the forceps when they had been employed. Suspended animation was likely to occur whenever a child was born with an imperfectly developed nervous organisation, and it was well known that small feeble children expelled with great ease from the maternal passages were often difficult to resuscitate. Referring to one of the idiot children shown by Dr. Wiltshire, it would be well not to attach too much importance to its difficult delivery as a cause of its mental weakness, because it was obvious that the mother, who stood by, was an imperfectly developed creature in every respect, and, according to the theory of natural selection for healthy progeny, should never have been a mother at all.—Dr. FLETCHER BEACH remarked that his experience at the Clapton Idiot Asylum, to a great extent, bore out the remarks made by Dr. Down.—Dr. J. BEVERIDGE SPENCE stated that he had noticed at Earlswood the cases associated with tedious birth and suspended animation manifested great improvement in their mental state during their residence at the asylum, and were generally capable of receiving and benefiting to a considerable extent by the instruction imparted to them. Well-marked choreic movements were generally observed.—Dr. WESTMACOTT inquired whether drunkenness in the parents was not a frequent cause of idiocy.—Dr. BRUNTON said he would like to ask the experts how soon after birth they could discover the presence of imbecility in an infant. Children born healthy, but subject to artificial and improper feeding, suffered from diarrhœa, and convulsions often ensued; suspended animation, with disturbance of the cerebral functions, resulted, and imbecility, as a consequence.—Dr. HAYES thought a more minute classification was requisite. No safe conclusions as regards prolonged or obstructed labour, instrumental interference or non-interference, could be arrived at without this.—Dr. ROUTH inquired as to the degree of consanguinity among the parents. In America the influence of this had been noticed.—Dr. GRAILY HEWITT considered Dr. Down's facts and suggestions most valuable and interesting, but they needed confirmation. In regard to the connexion between obstructed labour with pressure arising therefrom, and idiocy of the offspring, we must examine the facts attentively before admitting that such a connexion subsists. He could hardly believe that if obstructed labour had a distinct effect of this kind it would so long have escaped the attention of obstetric practitioners.—Dr. EDMUNDS thought that the statistics were worked out into a fallacious form; the numbers of first-born, second-born, &c., formed a rapidly decreasing series. Taking the average number of children in a family at four, there would obviously be in the community 25 per cent. of first-born children, a proportion practically identical with those shown as first-born among those 2000 idiots. As to the influence of pressure upon the fœtal head as a cause of idiocy, he had never noticed this, and yet he had observed some 2500 cases.—Dr. LANGDON DOWN, in reply, said he was much gratified by the discussion which his paper had called forth. He regarded Dr. Little's paper, referred to by Dr. Barnes, as a valuable corroboration of his own researches. There were generally several factors in the production of idiocy. Given a neurotic tendency, the tedious labour and suspended animation might determine the catastrophe. He had on this occasion adopted the classification he considered most practical—viz., accidental and developmental.

Reviews and Notices of Books.

Compendium der Krankheiten des Nervensystems. Von Dr. R. H. PIERSON. pp. 244. Leipzig: Ambros Abel. 1876.

THIS work forms one of a series of students' handbooks of which we have not the precise counterpart in the English language. Within a small compass the author has collected together the various diseases of the nervous system, commencing with affections of the brain and its membranes, taking next those of the spinal cord, then diseases of the sympathetic, or vaso-motorial trophic neuroses, then diseases of the peripheral cerebro-spinal nerves, and, lastly, general neuroses. For the most part the work is well done, and, as an instance of the manner in which the book is planned, we may turn to the article on Syphilitic Affections of the Brain (pp. 60—64). These affections may depend on (1) diseases of the osseous structures and membranes covering the brain, as nodes, gummata, periostitis, chronic meningitis, &c.; or (2) as

specific disease of the larger arteries at the base of the brain, especially of the carotid and its Sylvian and callosal branches. The arterial affection begins as an infiltration of new cells beneath the interna, associated with changes in this membrane, leading to elimination in the calibre of the vessel and consequent thrombosis or even absolute obliteration of arteries, resulting in softening of the region supplied by the vessel, if this be a terminal artery. (3) Gummata, the nature and usual seat of which are given; and the symptoms being as various as the seats of the different lesions, little is said concerning them; but the facts pointing to diagnosis are summed up as consisting in contractions of different groups of muscles, especially the biceps and external rectus (of the eye?), palsy of single cerebral nerves—e. g., of third, fourth, seventh, or ninth singly; unilateral convulsions, starting from peripheral parts, disorders of speech, modified aphasia, or slow hesitating speech, and disorders of sexual functions, as impotency, and especially the evidence of syphilis, from the history or objective signs. He urges the employment of antisyphilitic remedies in doubtful cases, as often of service in clearing up a diagnosis; but considers that only hysteria or chronic alcoholism, both of which do not exclude syphilis also, as being the only disorders likely to be mistaken for it. Then a page is devoted to treatment, in which Heubner, Broadbent, &c., are quoted.

It will be seen that only the barest outline is given, but there is no doubt the book will fulfil a useful purpose. The author has been desirous, so far as his space permitted, of including all recent opinions on the subject. Thus, although he places progressive muscular atrophy under the head of disorders of the sympathetic, he gives an outline of the views of Friedreich on the one hand, and of Charcot, Rosenthal, &c., on the other, with regard to the pathology of this disease. In the treatment of writer's cramp he places first Dr. Poore's method of rhythmical galvanisation, and considers it to be the only rational method of treatment yet adopted for this disorder. The reader will find this, on the whole, a reliable digest of the present state of knowledge upon the disorders of the nervous system, but from its brevity he must fain seek in larger works for much information which is here so much condensed that sometimes it appears as if undue stress were laid upon trifling points, which are treated of at as much length as the more important.

Micro-photographs in Histology, Normal and Pathological. By CARL SEILER, M.D., in conjunction with J. GIBBONS HUNT, M.D., and JOSEPH G. RICHARDSON, M.D. London: Macmillan and Co.

WE have received the first five parts of the above work, which is in course of publication in London and America. We consider that great credit is due to the originators of this enterprise, and desire that, as far as possible, encouragement should be given to them, since photo-micrography will probably at some future time, when the difficulties of its application are conquered, become a very important aid in instruction, though it can never replace the use of the microscope itself.

The plates are very nicely got up on good paper, and the impressions of the objects seen are sufficiently large. Their relative value, however, differs considerably; some of them being excellent, and showing that care only is required to obtain good results, whilst others are very hazy, and could not possibly be recognised without the accompanying letter-press, and then only with difficulty.

We quite acknowledge that several points have to be considered. A section may be a very pretty one to the eye, but may make a bad photograph, by reason of its thickness; or the markings it presents may be so faint as not to come out well in the photograph, or the conditions under which the photograph was taken may be unfavourable. Still the intelligence and skill of the author must be tested by the result. There is a capital illustration of pavement epithelium, and very good ones of non-elastic connective tissue, cartilage, hepatic cells, blood of ox and man, kidney and urea. Those of skin, epithelioma, elastic connective tissue, cornea, bone, enchondroma, fat-cells, and nephritis are passable. We mean by passable that, as in the case of bone, no mistake can be made in regard to the object represented, but that the finer details fail in distinctness. The size, form, and relative position of the Haversian canals can be readily seen, but the concentric rings are only obscurely visible; the lacunæ are clearly marked, but the canaliculi are smudgy, if we may use the term. The plates on endothelium, scirrhus, and leukæmia, we should not have been able to identify; yet even here the fault seems to lie not so much with the artist as excessive thickness of the sections, or with the imperfections of the method when extremely thin sections cannot be obtained. Though compelled to pass some strictures on this work, we sincerely trust that it will meet with success.

Histological Demonstrations: a Guide to the Microscopical Examination of the Animal Tissues in Health and in Disease. By GEORGE HARLEY, M.D., and GEORGE T. BROWN, M.R.C.V.S. Second Edition. London: Longmans.

THIS little work may be regarded as fairly fulfilling its intention of being a guide to the student in the microscopical examination of the tissues. It is remarkably well-illustrated, and many of the illustrations have the advantage of being original. The descriptions of the fluids, tissues, and organs of the body, as seen under the microscope, and the modes of mounting them &c., are correct as far as they go. The chief sins of the book seem to be those of omission. For instance, we nowhere find the slightest reference in the body of the work nor in the index to the method of imbedding in paraffin, pith, carrot, &c., which is now one of the commonest of microscopical manipulations, and whic gives far better results than sections made with a Valentin's knife—a proceeding that we observe is more than once recommended. No reference, again, is made to the use of perosmic acid, nor of chloride of gold, as an agent for staining nerve-fibres. On examining the accounts of the tissues, we find that, under the head of muscle, the absence of sarcolemma in the fibres of the heart is not mentioned, nor is any account given of Hensen's, Krause's, or Schäfer's views on the structure of muscular fibres and fibrillæ. In the section on nerve, Ranvier's constrictions of the neurilemma, and the presence of nuclei in this membrane—facts of capital importance — are omitted. The term "blood-corpuscle" should have been substituted for "blood-cell," which is often, though not always, employed. The second part of the book on Morbid Histology is very good, and some points the student will meet with here that are not usually given in works of this kind—such, for example, as tubercle, adenoid cancer, &c., which are again well illustrated. The entozoa are very well and clearly described.

THE mortality in London last week was at the rate of 22 per 1000 annually. There were registered 1413 deaths, including 75 from small-pox, 31 from measles, 54 from scarlet fever, 6 from diphtheria, 23 from whooping-cough, 28 from different forms of fever, 19 from diarrhœa, and 282 referred to diseases of the respiratory organs. The Metropolitan Asylums Hospitals contained 696 small-pox patients on Saturday last. The benign influence on public health of the mild weather we continue to experience is shown in the comparatively small mortality from diseases of the chest, the number of deaths being 221 below the corrected weekly average.

REPORT
OF
The Lancet Special Commission
ON
PUBLIC HYGIENE IN PARIS.

No. II.

THE necessity of sanitary legislation has dawned upon the public so gradually, that steps in this direction have only been taken one by one, and after much faltering and hesitation. In France, as elsewhere, law has followed upon law, in an unconnected manner, laying undue stress on some points, neglecting others altogether, and resulting in a confusion of enactments and a conflict of authorities which are as bewildering to the foreigner as they are injurious to the native. Thus we have before us a somewhat ponderous collection of French sanitary enactments dating in some instances as far back as 1523. According to the old *coutume de Paris*, or law of the town, we find that François I. and Henri II. were particularly interested in the great question which still remains unsolved. It was in obedience to their orders that every house in Paris was provided with a privy, and, for the most part, they have unfortunately retained this source of infection to the present day.* Little advantage, however, would be gained by the study of laws promulgated before the most elementary principles of hygiene were known; and we therefore content ourselves with observing that as these matters have been debated for many centuries, it does not say a great deal for the progress of a nation which has taken so much time to attain comparatively small results.

As at present constituted, the Government of Paris is divided under two heads; and, strange to say, both these authorities are invested with sanitary powers. Indeed, it is difficult to indicate whether the health of Paris depends more on the action of the Prefecture of Police or on the Prefecture of the Seine. The duties of these rival prefects are in some respects so nearly alike that it has often happened that the inspectors of the first authority have met those of the second in the same house, and found them investigating the same grievance. The Prefect of the Seine nominates the Committee for the Inspection of Unwholesome Dwellings, of whose work we shall have to speak at length on a future occasion; while the Prefect of Police appoints a sanitary committee known under the title of the Conseil d'Hygiène Publique et de Salubrité. Then, again, the Prefect of the Seine watches over the cleanliness of the streets, the sewers, and the emptying of cesspools; while, on the other hand, the Prefect of Police nominates the inspectors who superintend unwholesome or dangerous industries. Why one prefect should be considered specially capable of watching the condition of the sewers, while the rival prefect superintends the manufacture of manure, we are at a loss to understand. Evidently the same authority might do the same work, and we fear that this anomaly can only be explained by political considerations, which it is not our purpose at present to investigate. Without attempting to enter into details, and speaking in a broad sense, we may state that the Prefect of the Seine, although nominated by the Head of the State, and, therefore, not elected, nevertheless represents the locality, for he is the Chairman of the Municipal Council, and this body is elected by universal suffrage. To this officer the right of entry into private houses is entrusted, and it is he who is responsible for the internal condition of all Paris houses. The Prefect of Police represents the principle of centralisation; he is altogether independent of local influences; on him, therefore, depend public rather than private interests. He is responsible for the security of the streets, and is expected to suppress all that may cause the outburst of a revolution or of an epidemic. We imagine, however, that he is more on his guard against the former than against the latter danger.

* Various decrees to this effect bear the dates of 14th March, 1523; 4th March, 1524; 13th September, 1533; and 30th April, 1663.

To cope with epidemics, &c., the Prefect of Police has a somewhat elaborate machinery at his disposal. Each of the twenty arrondissements of Paris, together with some of the outlying suburbs, possesses a local sanitary committee. Each of these committees should be composed of nine members, presided over by the mayor of the arrondissement. As far as practicable, they should contain at least two doctors of medicine, one chemist, a veterinary surgeon, an architect, and an engineer, all chosen from among the more popular and notable inhabitants of the district. This selection is managed in a somewhat peculiar manner, destined, we presume, to combine local influence with the predilections of a centralised government. Thus the mayor of the arrondissement, who is the elect of the people, presents a list of three candidates for each vacant post to the Prefect of Police; and it is the latter Government functionary who decides which of the three local favourites shall be a member of the district sanitary commission. The most important organisation is, however, the Conseil d'Hygiène Publique, which is a sort of central committee, nominated exclusively by the Prefect of Police, subject to the approval of the Minister of Agriculture and Commerce, and which can command the services of all local bodies, thus welding together for a common purpose all these various committees. Separately and conjointly, these bodies have to watch for and prevent all causes of endemic, epidemic, or epizootic diseases, to provide for vaccination, to distribute medical aid to the indigent, to improve the sanitary condition of the industrial or agricultural population, of workshops, schools, hospitals, asylums, barracks, prisons, &c., and to ensure the wholesome condition of all alimentary and medicinal substances sold to the public. This latter task is perhaps more successfully and ably accomplished than any of the preceding. The committees have also to report on all projected public works, in so far as they are connected with the public health; and in this particular, again, the Parisians have certainly distinguished themselves. We feel convinced that the broad streets, the majestic boulevards, the numerous parks and gardens, and the stately trees on all sides, not only justify the pride of the artistic Parisian, but help to protect his splendid city from the scourge of disease.

The better to appreciate the work of the Conseil d'Hygiène Publique, we called on Monsieur Lasnier, secretary of the Council, and chief of that section of the Prefecture of Police entrusted with the supervision of injurious industries. With the courteous assistance of this gentleman, we were able to obtain all the published documents. These are, unfortunately, somewhat behind date; but, as no noticeable progress has been accomplished of late years, they will serve to illustrate the working of the system. We find, for instance, that from 1862 to 1866 some 3000 cases were investigated, and this enables us to judge of the amount of work done. Of all these cases, those which contrast most favourably with what we attempt in England relate chiefly to the food-supply of the capital and to the dangerous industries or nuisances which surround it. We have not, however, sufficient space to allude to more than a few typical cases, and the supply of bread naturally holds the first place. This has been so strictly watched that, during the four years in question, there was no need to prosecute any of the Parisian bakers. One tradesman, who mixed potatoes with tapioca, was prosecuted, as were many others who sold goods under false pretences. In other cases individuals who had no dispensing licences were restrained from selling medicated goods, such as tapioca mixed with phosphate of soda. A false coffee, grandiloquently named "Mokaïde," was discovered to be composed of scorched rye, coloured with burnt sugar and a small quantity of chicory, the whole flavoured and perfumed with a few drops of essence of bitter almonds. Among many other similar instances, we find that the sweetmeats and liqueurs have been the subject of some special inquiries, which have resulted in the issue of a decree forbidding the employment for colouring purposes of all injurious mineral or vegetable substances. It was also found that perfectly wholesome sweetmeats were often placed in elaborately decorated boxes or bags, coloured with mineral poisons. Orders were, therefore, issued to the effect that these receptacles should be as free from poison as the *bonbons* themselves. From this point a step further was reached, and it was decided that butchers, pork butchers, &c., should not be allowed to wrap up their meats in stained

paper. It often happened that old posters, such as a brilliant red or green play-bill, were used for this purpose, and the colouring matter would naturally come off on to any moist or greasy matter it enveloped, thus producing more or less serious accidents.

Another most useful investigation was made concerning the hardware manufactured or sold in Paris for cooking purposes. This was done at the suggestion of the Minister of Agriculture and Commerce, all the sanitary committees aiding in the work, and Messrs. Beaude, Chevallier, and Poggiale were the reporters. In the outlying districts of Paris, pottery to the annual value of £35,000 is produced, and it was necessary to ascertain—firstly, whether lead or copper entered into the composition of the glazing; and, secondly, whether the oxide of lead was vitrified on the surface as a silicate, or whether it was simply melted. After visiting a great number of factories, M. Drouard was able to ascertain that the brown colour in hardware was obtained by a mixture of peroxide of manganese, and the green by the introduction of a slight quantity of oxide of copper, improperly termed "calamine," while minium and sulphide of lead produce the yellow glazing. There are therefore two deadly substances in use—the minium and the oxide of copper. If the temperature of the oven were sufficiently elevated, the oxide of lead would be converted into silicate of lead, and be able to resist the action of at least weak acids. But to ensure the success of this combination, it is necessary to consume a large quantity of fuel, and in Paris this operation is particularly expensive. The manufacturers consequently seek to reduce their outlay, either by augmenting the quantity of oxide of lead, or by burning less fuel. In this case the minium spread over vessels placed in the upper part of the oven is simply fused with the clay, and is easily dissolved by the most feeble acid. Various experiments were made in all the arrondissements of Paris, which conclusively proved that acid liquids, such as sour milk, and also grease, often dissolved the oxide of lead contained in the hardware used for domestic purposes. The reporters consequently resolved that the strictest supervision should be kept over the manufacture of hardware for domestic purposes; that the manufacturer should be compelled to affix his mark to each article, so that it might be traced back to him whenever the glazing was found to have been improperly effected.

Having elucidated these facts, the Conseil d'Hygiène Publique proceeded to study what evils might arise from the different kinds of roasting apparatus used in the capital, and discovered a certain *rôtissoir à gaz*, which had actually caused severe illness. This was presumed to be an improvement on the homely Dutch oven, and, the better to enclose the heat, it was covered with enamel. At the top there was a perforated receptacle for the salt and acid liquid destined to become gravy. This trickled gradually over the roast and down the side of the roaster, and collected in a basin below. By occasionally ladling this liquid out and replacing it in the receptacle above, the joint was constantly basted with but little trouble. The experiments made by M. Poggiale enabled him to affirm that the enamel covering this roaster yielded to the influence of cold vinegar containing six per cent. of acetic acid, or to nitric acid diluted with twenty times its volume of water, or to common salt in boiling water; that the iron was soon bared and the liquids became charged with a considerable proportion of lead. The gas communicated a brown tint, due to the production of sulphide of lead, which was readily detached and mingled with the food. Finally, the carbonic acid arising from the combustion of the gas was likely to engender carbonate of lead, easily soluble in the acetic acid contained in the water or gravy. Thus it happened that the economic householders who patronised the *rôtissoir à gaz* were poisoned each time they indulged in roast for dinner. This led to the suspicion that the enamelled stoves in such common use might also lead to poisoning, but after various experiments the Conseil d'Hygiène Publique decided the point in the negative.

In dealing with questions such as the above, the Parisians have great advantage in possessing an organisation composed of men of deep scientific knowledge and extensive practical experience. The Conseil d'Hygiène Publique does not content itself with proclamations of abstract principles and scientific lamentations over the preventable evils which beset us on all sides. Any practical suggestion emanating from this body is generally carried out with the energy and force that characterise the Prefect of Police. Thus, the other day a telegram reached the Council to the effect that a number of pigs exhibiting the preliminary symptoms of disease had been killed before the marks of the complaint had become too evident to be hidden, and sent up to Paris to be sold as pork. Inspectors were at once sent to meet the train and confiscate the pork. With such a power as that of the Prefect of Police to back its decisions, the Council of Public Hygiene ought to accomplish the most effective reforms; but, as we have shown in our previous report, in some respects their action is very lax; and we can only wish they would display the same energy and scientific knowledge in the suppression of zymotic diseases as in securing wholesome food for the Paris markets.

DR. ROUSSEL'S TRANSFUSING APPARATUS.

To the Editor of THE LANCET.

SIR,—My Transfuser is based on theoretical principles, easy to understand and approved by long experience. Its general form is easy to imitate roughly, wholly or in part, but its perfect construction and the excellence of the materials employed are conditions essential to the success of the operation. Without these conditions the contact with air and other interfering agents produce coagulations fatal to the patient.

Professor Béhier, of Paris, has published (*Journal des Sciences*, February, 1873), the statement that he had experienced a failure in trying Roussel's transfuser. Similar misfortunes have happened to surgeons in Florence and Berlin. Now, at that time I myself had not settled the perfect form of my model, and no transfuser had been given out. These three surgeons had been deceived by *contrefaçons* badly constructed, and falsely attributed to me. My drawings had been copied at the Exhibition by merchants, who have profited by the circumstance that medical dignity forbids me to take out protecting patents. The deception has been discovered later by the three surgeons; but since it is very hard to counteract a bad impression, all my efforts in those countries have been frustrated.

I am unwilling to allow similar disasters to pursue me here in England, and that at the moment when, after fourteen years of work, I at length succeed in propagating the perfect transfusion of blood.

I have recently found in London, and at my friend Dr. J. Williams's, this imitation supplied under my name. This, in the interest of the patients and of my scientific reputation, I absolutely refuse to tolerate, for it is incapable of effecting a good transfusion, and I decline the responsibility of the accidents which it may occasion. No author would allow the circulation under his name of a work filled with grave errors which he has always denounced.

Notwithstanding all my efforts, and the good will of several makers, I have not yet found in England that perfect fabrication of pure caoutchouc which is indispensable for the successful transport of the blood, as well as for the durability of the apparatus. It is because they are supplied with bad caoutchouc, which is rapidly destroyed, that the directors of the Indies and the Navy hesitate to adopt my transfuser, which is admitted into the hospitals of England.

It is by the support of the Government that I have been able to obtain that, in Russia, at the imperial factory alone, several hundred transfusers have been officially furnished to the military hospitals and surgeons of Russia, Roumania, Servia, Austria, and Belgium.

Waiting for a good English fabrication, and to avoid the perishing of patients from bleeding, or be lost by the use of bad instruments, I have determined to have all the transfusers addressed to myself, in order that I may be able to check them and to sign them, as a guarantee to patients and surgeons. This control has been required of me by all the Governments which have adopted my transfuser, and every apparatus bears my name on a plate and on the balloons. The price is five guineas for the transfuser complete, with all its accessories, in an appropriate case. I hold myself at the service of all my colleagues for any information or for operations.

I am, Sir, yours &c.,

Gloucester-place, Hyde-park, Dec. 1876. DR. J. ROUSSEL.

THE LANCET.

LONDON: SATURDAY, DECEMBER 23, 1876.

IT is to be deplored that the south-west of the metropolis should have become the seat of an agitation respecting the formation of a small-pox hospital there, during the present epidemic of the disease, not less vehement than that which disturbed the north-west with regard to the Hampstead Small-pox Hospital during the last epidemic. There is a habit of unreason among the public generally as to the neighbourhood of hospitals for infectious diseases, and especially for small-pox, which yields little to argument or experience, and which, however irrational in its medical aspects, has to be taken into account in selecting the sites of such hospitals. If the medical were the sole considerations which prompted that unreason, it might justly be disregarded at all times in the common interest; but other considerations, mixed with, it may be, or arising remotely out of the medical, influence it, which cannot be rightly ignored, and ought not to be treated slightingly. The disregard of these considerations in the original selection of the Hampstead Hospital site lies at the bottom of the persistent dissatisfaction of the people living contiguous to it, and of the legal proceedings about to be instituted against the Asylums Board with regard to it. The metropolis ought to have been saved from any recurrence of agitation similar to that which kept the north-western section in a continual worry during and for some time after the late epidemic, unless under an extreme exigency. But so far from this being the case, the Metropolitan Asylums Board in the present epidemic actually would seem to have precipitated a like worry in south-west London, and strangely enough with reference solely to procuring temporary hospital accommodation for small-pox patients. In what manner an exigency could have arisen at this period of the epidemic calling for such a course on the part of the Board deserves attentive consideration, whether regarded from the early stage of the epidemic, or from the amount of hospital accommodation actually or readily available which the Board might be presumed to have at command, judging from the accommodation in use in the epidemic of 1870-71. The local difficulty at Wandsworth is chiefly of importance in proving that there is something radically wrong either in the exercise of the functions of the Asylums Board, or in its constitution, or in both.

It is no new thing for the Asylums Board to be behindhand in its provision for epidemics. It was behindhand in the relapsing fever of 1868, again in the small-pox of 1870-71, and now once more in the existing epidemic of small-pox; although in the two first-named instances it made vast efforts in endeavouring to overtake the needs for hospital accommodation developed during the progress of the epidemic, and in the end came fairly abreast of them. We are not imputing blame; we are simply stating facts, for we do not know to what extent a Poor-law authority may be authorised to make hospital provision in advance of a defined exigency. We are now witnessing a series of events similar to those which happened in 1868 and in 1870-71. The existing epidemic, although only at its beginning, has already, in effect, exhausted the available accommodation of the Board, and the Board has again entered upon the struggle of attempting to overtake it.

Before we can clearly understand this seeming unreadiness of the Board to deal with an epidemic at the period when efforts for its restraint would be most effectual, we must disabuse ourselves of the notion, which is becoming fixed in the metropolis, in spite of official explanations to the contrary, that the Asylums Board has any function whatever of arresting epidemics. Its function, so far as sickness is concerned, is to provide for the pauper sick, and for their curative treatment in hospitals or otherwise, as set forth in the Act constituting the Board. To the extent that this provision leads to the isolation of the infectious pauper sick it becomes a sanitary measure of the first importance, although primarily designed with a view to Poor-law administrative economy and efficiency. But the Asylums Board, by dissociating its hospitals for infectious diseases from the workhouse, and making them in every respect first-class institutions of their kind, has purged them so largely of the taint of pauperism that the distinction has come to be for practical purposes rather verbal than real. Hence persons who otherwise would have avoided them no longer hesitate to avail themselves of them in times of epidemic disease, and in increasing numbers, especially with reference to small-pox. Thus it has come to pass that the hospitals of the Asylums Board are now looked upon as the sanitary hospitals for the metropolis, and the Asylums Board as, for all practical purposes, a great sanitary hospital authority. So much is this the case that, we understand, one at least of the Vestries of the metropolis has, since the small-pox epidemic of 1870-71, sold the hospital accommodation it possessed, on the ground that the Asylums Board would provide all that was needful in times of epidemic sickness.

The Asylums Board, indeed, appointed to do one kind of thing, has by the force of events been compelled to do another and very different kind of thing, for which by its constitution and powers it is unfitted. With regard to its proper work, some sort of reasonable estimate can be formed of its true magnitude, and there can be little doubt that in respect to infectious sickness among paupers, justly to be held as such, the Board has amply provided for it permanently, and that its occasional arrangements have been conceived upon a generous scale. But with regard to the work thrust upon it, no proper estimate can be formed of its magnitude in any given epidemic, and the arrangements made to meet one series of events need not meet also, and may, indeed, be expected to fail with reference to, another series of events. It is to the abiding credit of the Asylums Board that it has been able to do so much as it has done in the several epidemics named under the anomalous circumstances in which it has been placed; but not the less is it a discredit to the metropolis that its sanitary hospital work in this respect should be done in so irregular a manner, and that each recurring epidemic should find the sanitary authorities unprepared to deal effectually with it by isolation It would seem, indeed, as if the sanitary aspect of this

question were receding out of sight, and as if it were about to become a Poor-law question pure and simple. To the present moment, during the existing epidemic, the Local Government Board, the Central Sanitary and Poor-law Authority, has dealt with it solely as a question of Poor-law administration. It has within the last few days called upon the Guardians to supplement the efforts of the Asylums Board with local provision of beds for small-pox patients; but no steps appear to have been taken to advise with the sanitary authorities of the metropolis, upon whom rests the direct responsibility of providing hospital accommodation for the isolation of the sick for sanitary purposes. The Local Government Board appears to have entirely foregone its sanitary functions in this epidemic, except as to vaccination, subordinating them to its Poor-law functions. Can it be that the Board has forgotten that it is the Central Sanitary Authority for the metropolis as well as for the rest of the kingdom?

While the anomalous condition of things here described remains we may not hope that the sanitary management of epidemics in the metropolis will be put on a proper footing, and that controversies, discreditable alike to the local and the central authority, such as the controversy now waged in south-west London, will be avoided. It is a public scandal that the greater number of the sanitary authorities in the metropolis are leaving their proper work to be done for them, and of necessity imperfectly, as to isolation of the sick by the Poor-law authority; but it must be confessed that the action of the Local Government Board to the present has, to some extent, justified them in so doing. Obviously the whole question of the management of epidemics in the metropolis requires to be considered in its sanitary aspects, and the Poor Law relieved from quasi-sanitary duties which it cannot and ought not to perform.

IMPETUOSITY is a failing that cannot be ascribed to the Council of the Royal College of Surgeons of England. Between five and six years' deliberation and discussion were necessary to enable them to decide whether they should accept or reject the Conjoint Examination Scheme. About three years ago the advisability of making some alteration in the regulations relating to the education and examination of candidates for the diploma of Fellow was felt and acknowledged. A committee was then appointed to consider the matter and to report thereon to the Council. For nearly two years nothing whatever was heard of this committee, and, indeed, its existence had by many persons been entirely forgotten. A trifling circumstance directed fresh attention to it, and in the early part of the present year the committee drew up a report, which was in many important particulars so faulty that the Council sent it back for reconsideration. Shortly after this an amended report was presented, and eventually approved by the Council on April 13th. The same committee was then authorised to prepare the necessary bye-laws, standing rules, and regulations. A report of these alterations was presented to and accepted by the Council on Thursday, the 14th inst., exactly seven months afterwards.

A reference to our columns of May 6th, p. 680, will show what these alterations are. Very briefly stated they are as follows. First, that, subject to certain regulations, any member of the College be admissible to examination for the Fellowship; secondly, that a member of less than ten years' standing be admissible to the First Professional Examination in Human and Comparative Anatomy and Physiology at any time after receiving the diploma of Member, and to the second examination in Surgery, including Surgical Anatomy and Pathology, at any time after passing the First Examination, on producing satisfactory evidence of having attained the age of twenty-five years, and of having been engaged not less than six years in the study, or study and practice, of his profession; thirdly, that a member of not less than ten years' standing be examined in Surgical and Regional Anatomy at the first examination, and in Surgery, chiefly Practical Surgery, at the second examination, to which he shall be admissible at any time after passing the first. It follows that the Preliminary Examination will no longer be compulsory, although it has been determined that those who do pass it shall be allowed the privilege of presenting themselves for the First Professional Examination at the end of their third winter session, other candidates not being admissible until they have obtained the Membership; that six years' sojourn at a recognised hospital and medical school will no longer be indispensable. A further concession is made on behalf of Members of the College in Her Majesty's service who will be admissible, on a special vote of the Council, to the second part of the examination at any time after passing the first part, when they have completed six years' study, or study and practice, of their profession; but, in compliance with the conditions of the charter, the diploma of Fellow will not, in such cases, be conferred unless the candidate have attained the age of twenty-five.

These new regulations certainly seem calculated to induce a greater number of persons to seek the Fellowship; but it is not so obvious that they will tend to increase the status, intellectual and professional, of the Fellow. The old regulations pressed, it is true, somewhat hardly on many highly esteemed and valued surgeons, both in the metropolis and in the provinces; but the amended regulations are open to the serious objection that they will allow of the creation of three distinct classes of Fellows, none of which may be called upon to offer the same credentials of general culture and of technical knowledge that have hitherto been insisted on. There will, in the first place, be those who, having passed the preliminary examination for the Fellowship—which, by the by, we regret has been lowered,—will present themselves for examination in anatomy and physiology at the end of their third winter session, and then obtain the diploma of Fellow after six years' study at a medical school; secondly, those who obtain the Fellowship within ten years of receiving the diploma of member; and, thirdly, those who do not obtain the Fellowship until they have been members for ten or more years.

A wide difference between the antecedent conditions of the three sets of candidates will almost imperatively demand a lowering of the examinational standard, and will certainly lead to deterioration of professional training and education. To expect from those who have only passed through the ordinary curriculum for the membership to show the same acquaintance and familiarity with anatomical and physio-

logical facts as those who have devoted three years to the study of these subjects would be unreasonable, and likely to be attended by some of the worse evils of the examinational system. The application of the most judicious system of examinational test cannot replace the advantages, moral as well as educational, of a six years' curriculum. The extensive and prolonged course of study hitherto required for the Fellowship has, we believe, done more than examinations to give character and prestige to the Fellows of the College, and not the least of the evils to be apprehended from the operation of the amended regulations will be that the mode in which a candidate acquits himself at examination will become the only criterion of fitness for holding the highest surgical qualification in this country.

WE have recently spoken of some of the more salient features of the Medical Societies as they strike a casual observer, and we now proceed to point out some of their more obvious defects and their mode of remedy. Let it be clearly understood that we speak only of the meetings, not of the Societies themselves nor of their Transactions. Some Societies—notably the Medico-Chirurgical—carry on a work independent of the meetings, which is of the highest value, and in no way connected with them. The Transactions, too, of the Royal Medical and Chirurgical, the Pathological, Obstetrical, and Clinical Societies, are of the greatest value as treasuries of observation and research, and would alone constitute a sufficient justification for the existence of the Societies. But there is, we are convinced, too great a tendency to regard the Transactions as the sole scientific outcome of their existence, the progeny whose character alone is important, its origin and method of birth being matters of unconcern. Notably is this the case with regard to the Pathological Transactions, the view being held even by distinguished members of the profession. It needs but little reflection to convince oneself that this view is erroneous, and prejudicial even to the scientific work of the Society. Even were the Pathological Society—what, indeed, it tends to become—solely devoted to morbid anatomy, it would be of the highest importance that the specimens exhibited should be carefully described and fully discussed. Observation, no less than theory, is liable to be erroneous or one-sided, even when the observer is thoroughly honest and competent; that which to one man is rare and anomalous is to another, with a different field of work, of every-day occurrence; and a preconceived theory or hastily-adopted generalisation may limit the investigation and warp the view of the most scrupulous and honest observer. Hence a thorough discussion and criticism is of the highest value to the observer himself.

The meetings of the Societies are designed for the communication of new or important observations, clinical and pathological, their investigation and discussion; the consideration of important topics, whether new or old; and the comparison of experience on cases brought forward. Nor less important is the opportunity which they afford to those who deservedly hold a high position in the esteem of their medical brethren and the medical world in general, for the statement of their views and experience on important topics which they may have special opportunities for observing, or on which experience or research has led to a modification of their views. However large may be the sphere of the teacher or the influence of the author, it is, as a rule, active only in a comparatively small circle, or limited to a certain subject. And too often opinions which have been once held and committed to a book are quoted as the views of the author, who has been led by experience to abandon them long ago. No one can write all he knows, and few write on other than some special subject.

But if a subject is to be discussed, it is essential that it be worth discussing, that it be presented in such a form as to be readily apprehended, and that there be time for its discussion. Of at least a not inconsiderable number of cases and papers brought forward at Societies it may be said that they are valuable only to be briefly placed on record, and, in many cases, are only of use for statistical purposes. This is especially the case with the Pathological Society, where it is not uncommon for more than half the time of the meeting to be taken up with elaborate statements of cases differing in no manner or degree from those which have been observed, studied, and recorded over and over again, and constitute the basis of ordinary pathological teaching; or of theories grounded on an individual case which a more extended observation has shown to be utterly fallacious. Whilst we would extend all toleration to the junior members of the profession, it is not too much to require that the cases brought forward should have some interest beyond their ownership, and in some slight degree contribute to the progress of science, which they tend rather to hinder. But in this respect the Royal Medical and Chirurgical and Clinical Societies have an unquestionable advantage in the censorship which is exercised in the admission of papers, and their example might well be imitated.

But it is not only in the character of the cases and papers, but the way in which they are brought forward that improvement is desirable. The discussion often elicits observations of greater importance than the original cases; hence much of its value. But where the papers afford material for remark, it is often difficult to appreciate the salient points, which are overladen and obscured by irrelevant detail, which, though important for record, is embarrassing to listen to. We do not advocate the universal practice of reading papers in abstract, and, in some cases, especially clinical records, the omission of details of symptoms may lead to an erroneous impression as to the nature of the case. The practice at the different Societies in this matter varies. The general rule at the Pathological Society of oral description of the specimen, with a brief outline of its origin and history, is, doubtless, the best when possible, but would, as a rule, be out of question at the Clinical Society. Perhaps the least desirable is that adopted at the Medical and Chirurgical Society, and it is hard to know whom to pity most, the secretary, the author, or the audience during the reading of a long paper. However great the oratorical powers of the secretary, the reading of a paper on a subject in which perhaps he takes no special interest cannot be an easy or pleasant task, and he is unable to throw into it the personal interest of the author. If such a course were consistent with the dignity of the Society, we should strongly advocate a radical change

in this respect: either that the paper should be read by the author, or an abstract by the Secretary.

Again, the want of time for discussion is a great evil. We believe that if the papers were well chosen, and compressed into a reasonable limit, more work might be got through than at present, and yet abundant time remain for discussion. At least one-third of the time of discussion is at present wasted in irrelevant detail, or in observations which are due to misapprehension of the subject of the paper—time which would otherwise be available for valuable remark.

Again, it is, we think, a question whether the President should not have a greater power of controlling the course of debate than is now the case, and of recalling wandering talkers to the point. It is true that the influence of the President can be and is exerted in this direction without overt remark: and, without mentioning names, we may observe that certain distinguished presidents do exert this influence. But they have not the power to do anything beyond this, unless to suppress personal remarks. And here we may notice how widely the Societies vary in the extent and nature of discussion. The accumulation of material at the Pathological usually checks discussion, and hence the one extreme of insufficient debate is often reached; whilst the Medical Society, which joins somewhat of the garrulity of old age to its other qualities, frequently affords an example of the opposite extreme of talking against time, which can nowhere else be equalled.

We have thus indicated the main points in which reform seems to be most needed, and may briefly summarise them. The communications should be of value, either individually or in their bearings on medical science; they should be concise and clear, and when possible brief; they should, by preference, be spoken rather than read; and the points of importance for discussion should be clearly indicated. Finally, the president should not only direct the discussion, but should be allowed to exert greater control over its course.

And we must add that, in order to gain the reforms we have indicated, the presence of a larger number of the older members of the profession seems to be needed. Not only is their absence a discouragement to the younger men, but it tends to allow the old traditions, and even old observations, to fall into oblivion and neglect. The crude theories, the insufficient observation and research, which too often appear, would be less ready to show themselves in the presence of older and more experienced men, and progress, not relapse, would result. Add to this, the advantage of their ripe experience, of which we spoke before, and a strong case is made out for their more frequent attendance, even at some personal self-sacrifice.

It is in no carping spirit that we make these observations. No one will seriously contend that the meetings of the Societies fairly represent to the profession in this country, and still less to foreign countries, the average standard of scientific medicine in our metropolis. The Societies have done good and useful work in the past; there are indications of improvement, and a desire for further progress in the paths we have pointed out; and a united effort will, we doubt not, lead to still better results in the future.

IT is somewhat remarkable that, considering the size and importance of the Spleen, and the obscurity that exists in regard to its functions, so small a degree of attention should have been bestowed upon the nerves that are distributed to it. The histology of this organ has now been pretty satisfactorily determined, and certain points in regard to its physiology may be considered to have been established by the labours of FUNCKE, GRAY, SCHIFF, and others; but the nerves have been curtly dismissed by all authors, and FREY, one of the most recent who speaks with authority, merely says that they take origin from the plexus lienalis of the sympathetic, and consist principally, and not unfrequently almost exclusively, of the pale elements known as Remak's fibres. A recent paper by BULGAK which has appeared in the *Centralblatt*, supplies some interesting particulars in regard to the origin and distribution of the splenic nerves, and the effects of applying stimuli to them. His experiments were made upon dogs that had been previously partially narcotised by morphia or chloroform. The method he adopted was to open the abdomen by a crucial incision, and, after exposing the spleen with as little injury as possible, to cover the intestines and abdomen generally with soft linen cloths dipped in an artificial serum. The nerves surrounding the vessels were then excited by a weak galvanic stimulus. The results he has obtained show very clearly that the nerves distributed to the spleen are of two kinds, centripetal and centrifugal, for on excitation of the central extremity of one set of nerves when divided, well-marked general contractions of the spleen occurred which were obviously of a reflex character, and at the same time the animal, if at all sensible, gave indications of pain by its movements and cries. No such results followed excitation of the distal extremity. On the other hand, the irritation of the centric extremity of other nerves, when divided, caused no contraction or indications of pain, whilst irritation of their distal extremity induced contraction of the spleen, limited to the part to which the nerve was distributed. Excitation of the nerves generally caused the spleen to become harder, paler, and more granular on the surface than natural.

The determination of these facts led M. BULGAK to seek for the reflex centre, which receives the sensory and radiates the motor impulses to the muscular fibres, or, to use a phrase which is very convenient, to the "musculature" of the spleen. He soon found that all indications of reflex action ceased if the splanchnics were divided, and by a process of exclusion he at length demonstrated that all the motor and sensory fibres of the spleen ran in the great splanchnic nerve of the left side; on the division of this nerve, all signs of reflex action disappeared. It was thus sufficiently obvious that the centre was not in the coeliac ganglion, as has been generally believed, but was probably to be looked for in the spinal cord; and experiments made, with a view to determine its exact position, gave the following results. Induced currents of electricity applied to the cord at its junction with the medulla oblongata produced no effect, but when applied to the cord just below this point strong contraction of the whole spleen was immediately observed. Similar contractions occurred when any part of the cord was stimulated as low down as to the fourth cervical vertebra, but below this point they

became feebler and feebler till they ceased altogether about the eleventh dorsal vertebra. From these and other experiments he concludes that the splenic centripetal and centrifugal nerves enter the cord as low as the eleventh dorsal vertebra, and that they ascend in the cord to a sensori-motor centre situated in the cord between the fourth and first cervical vertebræ. It is probable also that the vaso-motor nerves of the spleen proceed from the same source. Some observations made to determine the effects of nerve irritation on the number of the white corpuscles issuing from the spleen showed that the number was greatest during the ordinary non-contracted condition of the spleen, that it diminished on contraction of the organ, and attained its minimum during the period of return to the normal state. If, however, the spleen were made to contract after it had been previously swollen by ligature of the veins, the number of leucocytes contained in the splenic venous blood underwent great augmentation.

Annotations.

"Ne quid nimis."

THE ELECTION OF EXAMINERS IN ANATOMY AT THE COLLEGE OF SURGEONS.

NUMEROUS complaints have reached us respecting the recent appointment of Examiners in Anatomy and Physiology by the Council of the Royal College of Surgeons of England. As we had previously announced, all the members of the old board offered themselves for re-election with the exception of Mr. Holden and Mr. Cooper Forster. The two candidates who were recommended by the Committee on Examinations in Anatomy and Physiology to fill the vacancies caused by the resignation of these gentlemen were Mr. Arthur E. Durham, of Guy's, and Mr. Sydney Jones, of St. Thomas's. After the candidates were balloted for at a meeting of the Council, Mr. Durham and Mr. Pick, of St. George's Hospital, were declared to be the new examiners. This action has naturally called forth a good deal of indignation from many teachers of anatomy both in London and in the country. Mr. Sydney Jones is a Fellow of the College of 1856; whereas Mr. Pick is a Fellow of 1866 only. No one will, we feel sure, regret the anomalous circumstance more than Mr. Pick himself, and we have no desire to add to his embarrassment. While those who selected Mr. Pick may be allowed to have acted under the full belief that he was best fitted by exceptional qualifications for the post, it seems necessary to remind them that a manifest injustice has been done to many esteemed Fellows of the College. Not only have the claims of many senior candidates, well-known as successful teachers of anatomy, been altogether ignored, but the schools to which some of them are attached have been left unrepresented. At present St. Thomas's, the London, Charing-cross, St. Mary's, and Westminster, to say nothing of the provincial schools, have no representative on the Board of Examiners, and to appoint a second examiner from St. George's under such circumstances can have no justification. Mr. Mason, one of the lecturers on anatomy of St. Thomas's, and Mr. Walter Rivington, of the London, who has been known for many years as one of the best teachers of anatomy in London, have good grounds for complaint, both being Mr. Pick's seniors in the profession and as Fellows. The last three Hunterian Professors of Surgery have been surgeons connected with St. George's Hospital; let us hope that the operation of the same influences that accomplished those appointments will not be able to secure to the same school a monopoly of all the emoluments of the College.

MERCHANT SEAMEN.

THE Report of Her Majesty's consul at Callao, recently published, comments emphatically on the gradual but marked deterioration as to physique of the British seamen frequenting that port. Two ships recently arrived there severely smitten with scurvy, but the opinion of our consuls, both here and at other foreign ports, seems to be that the men sign articles when practically unfit for duty, and that, as a natural consequence, the vessel is virtually unseaworthy from the commencement of the voyage, because a proportion of her crew are not physically competent to perform their work. This, and clouds of other evidence that have collected during the last six or eight years, ought to convince the President of the Board of Trade of the necessity of making Section 10 of the Merchant Shipping Act of 1867 compulsory, instead of, as now, permissive, and so utterly inoperative. We are informed that much opposition to such a course is anticipated from shipowners, who not only object to the possible expense of a medical examination, but declare that, inasmuch as in some ports a sufficiency of sailors can with difficulty be found, this inspection and probable rejection of a certain number of men on physical grounds would stop ships, and so hinder commerce to a very serious extent. A perusal of the *Shipping Gazette* will show, however, that this impression is not borne out by facts, and that in the north-eastern, as well as the other chief out-ports, there is usually a sufficient, and has lately been a superabundant, supply of seamen. We earnestly trust that the promises of several prominent members of the Government last session on the subject of the Seamen's as distinguished from the Shipping Bill, will result next year in a practical measure, comprising sound legislation as to medical inspection of seamen, and also as to scales of diet. A judicious change in the antiquated system on which the victualling of ships is still conducted would save thousands of pounds annually to the shipowner, and render the regular serving out of lime- and lemon-juice, unless under exceptional circumstances, a work of supererogation.

VESICATION BEFORE AND AFTER DEATH.

AT the recent Wilts Assizes a woman named Ann Goodfellow was charged with the wilful murder of her child. The circumstances of the case, as detailed in evidence, were of the most revolting character. It appears that the prisoner was delivered of a child on the 9th of July last, and according to her own statement it breathed once only. On July 11th an inspector of police went to the prisoner's house and inquired if she had the body of a child there. After some conversation she removed the cover from a saucepan which was on the fire, and on looking into it the inspector saw the body of a child. The body had evidently been boiled for a considerable time, for portions of the flesh dropped off when it was removed from the vessel. On the surface of the body were found some blisters containing, according to the medical evidence, some straw-coloured serum. The medical interest of the case consists in the value of these blisters in determining whether the child was alive or dead when it was put into the saucepan. The contents of the blisters, it is stated in the report of the trial, consisted of serum, but it is not reported what means were taken to determine the nature of the fluid.

The effect of heat on serum is well known; it renders it almost solid by coagulating the albumen. There can be no doubt that the body of the child found by the inspector

had been subject to great heat for a considerable time, and there can be equally little doubt that, unless the body was boiled in an alkaline solution (which is not probable), the albumen of the serum must have been entirely, or almost entirely, coagulated, and the fluid in the blisters, though of a straw colour, should not be regarded as serum. There is sufficient evidence, moreover, to show that blisters can be produced by the action of heat on the surface of the body after as well as before death. The experiments of Casper and others place this beyond question. Besides, the boiling of flesh is of frequent occurrence in our kitchens, and it is well known to cooks that bladders containing fluid very commonly, though not always, form on fowls while undergoing the process of boiling. Blisters produced during life differ, however, from those produced after death in the following points: the former are usually surrounded by a red ring of congested skin, and the surface beneath them is red and inflamed in character. These signs may, however, disappear after death, and they are absent in blisters produced post mortem. Again, the fluid of cutaneous bladders produced during life is far more albuminous than that of those produced after death.

There is some difficulty, even in favourable conditions, in deciding whether a blister found on a dead body was produced during life or after death, but in the case before us, the data upon which to form an opinion were entirely wanting. If the vesicles were formed during life the long process of boiling to which the body had been subjected must have destroyed their distinguishing marks, and it had become impossible to arrive at a correct conclusion with respect to them. On the other hand, the blisters may have been produced after death. There is nothing in the evidence as reported opposed to this view; indeed, the character of the vesicles as described by the medical witnesses appears perfectly compatible with it.

Which of the two views is correct it is not possible to determine, because blisters caused during life may ultimately assume the characters of those caused after death. Fortunately, however, the latter cannot assume the exact character of the former, and should consequently never be mistaken for them.

MEDICAL SYSTEMS.

ALL "systems" are bad, and medical systems figure among the worst. There is nothing more ineffably weak and witless than the system of "homœopathy." We say this without reference to the extra simplicity of infinitesimal doses. It is the folly of seizing on half of an idea and calling it a system that must strike sensible persons of every way of thinking as ludicrous. Some unlucky wight has been caught by one arm of a windmill and raised from the ground. You cannot get him down by pulling, so you push the mill round carefully, and he is carried over and comes to ground safely the other side. Straightway the yokels throw up their hats and cry "*Similia similibus curantur.*" A frozen man is rubbed with snow until circulation returns, thus avoiding the too sudden application of extreme heat; or a burn is dressed with hot turpentine on the same principle, and the charlatan chants "*similia similibus curantur,*" and calls his method a system! It is wondrously silly all this. Nevertheless there are people so grotesquely imbecile that although an individual with shaky views on religious subjects having once recovered from some malady with the assistance of colocynth, an "absence of religious opinions" is gravely put down among the indications for that useful drug, devout believers in "the system" do not perceive the absurdity of its pretensions. And now the poor people are about to build and endow a "School of Homœopathy." What a pity it is that some millionaire, with misdeeds to wipe out of memory, does not perceive the need of establishing a School of Common Sense! *Similia similibus curantur* would be a capital motto for an educational establishment wherein the too great cleverness of the uncommonly wise might be cured by the administration of small and repeated doses of common sense. A contemporary not prone to faulty reporting made one of the speakers at a recent meeting say that "no less than 70 'allopathic' practitioners had recently given in their adhesion to homœopathy." The returns from Colney Hatch did not support the assertion. It now turns out that, of 300 homœopathic practitioners, just 70 will support their school!

CASES OF ANIMAL POISONING IN GLASGOW.

THE last meeting of the Glasgow Pathological and Clinical Society was completely taken up with the consideration of three cases of animal poisoning. Of the three fatal cases of hydrophobia lately in the hospitals, two were examined after death, and these two were brought up for consideration at this Society.

In the first case, Dr. Forrest gave some interesting information as to the retriever bitch which had inflicted the bite on her master's hand. She had just had six whelps, and before inflicting the bite she had become peculiarly ill-natured, had refused to let her pups suck, and had snapped at various persons; she had also bitten her pups, one of which, at least, had died under some suspicion of hydrophobia. Dr. Dunlop gave a full account of the man's condition after admission to the Royal Infirmary, and described minutely the excitement and the spasms from which he suffered. The other case (the last one occurring in Glasgow) was that of a police sergeant who had been bitten on the hand by an unknown retriever, which met the officer while he was walking along the street. Symptoms of hydrophobia became developed in a month; he had been under observation all this time by Dr. McGill, the police surgeon, who at once removed him to the Western Infirmary on the appearance of the symptoms. Dr. Alex. Patterson detailed the course of the illness while the patient was in his wards. The man died on the fourth day; on the night before his death the spasms had almost completely disappeared, and his general appearance of improvement was such as to mislead the nurses into supposing that he was much better. The wound in the first case had been cauterised immediately with nitrate of silver; in the second case it was cleaned with a strong solution of carbolic acid immediately after the injury. The post-mortem appearances were negative except as regards the microscopic examination. Dr. Joseph Coates showed to the Society numerous sections under the microscope, exhibiting in the pons Varolii, in the medulla oblongata, and in the cord, a very marked infiltration of the sheaths of the vessels with inflammatory cells, and in one instance the section made revealed a small hæmorrhage. He also found some such accumulation of cells around the vessels in the neighbourhood of the bite, this being apparently out of proportion to the other appearances of inflammation present. These lesions were found in both cases.

The other case of animal poisoning was one of malignant pustule, contracted by a girl on her lip, and proving rapidly fatal. She was a worker in hairworks, and was engaged in spinning the hair, most of which was imported from North America, and only some of which was submitted to previous boiling and disinfection. Dr. Cameron detailed the patient's state while under his care at the Royal Infirmary. The chief peculiarity was the appearance, after admission, of a considerable number of small vesicles and pustules on the skin, mainly on the trunk. Another pecu-

liarity in the case was the occurrence of a high degree of albuminuria. From the remarks made by those present, this formidable affection seems almost unknown in Glasgow.

The interest excited by these unusual cases attracted a large attendance of the profession to this meeting of the Society.

ST. GEORGE'S HOSPITAL.

THE contest for the vacant post of Assistant-Physician at St. George's Hospital is likely to prove severe. Two candidates are in the field, and both are St. George's men. The senior is Dr. Robert Lee, formerly assistant Obstetric Physician, and now Curator in the museum of the hospital. Dr. Lee is M.A. and M.D. Cantab., and Fellow of the Royal College of Physicians, where, in 1874, he delivered the Gulstonian Lectures. The other candidate is Dr. Herbert Watney. This gentleman for some time has held the post of Demonstrator of Histology at St. George's, and has already made some contributions to the science of anatomy and physiology in papers read before the Royal Society. Dr. Watney graduated at Cambridge during the present year, and is a member of the Royal College of Physicians. It is not our province to deal with the respective merits of the two candidates, but we may express a hope that a contest which is likely to prove close will be carried on with temper and good feeling. Already a false move has been made by one of the candidates, Dr. Watney, in publishing his testimonials as an advertisement in the columns of the daily papers. Such a course is contrary to professional usage, and can only be designated as "most disastrous." Had the offence been committed by an older man, we should have felt bound to comment severely on his conduct; we are, however, unwilling to press hardly on a young man who is just entering on professional life, and who perhaps is not fully aware of the abhorrence with which any form of professional advertising is regarded amongst us, the more so as it is not improbable that, owing to the step on his part, he may be disqualified for becoming a candidate. We understand that at a meeting of the Governors last Wednesday a paper was received signed by Lord Chief Justice Cockburn, Sir John Holker, Sir T. Erskine May, Viscount Hood, &c., asking whether the advertisement in question was inserted *without permission of the Weekly Board*; for the 69th Rule states that "no governor or governors shall circulate any notice or statement bearing date from the hospital relative to any election, or tending in any way to influence the votes of governors at any election, unless such notice shall have been previously sanctioned by the Weekly Board." This rule certainly makes the circulation as an advertisement of the testimonial of the medical staff a positive contravention of the laws of the hospital; and the governors of the institution are quite right in deciding not to nominate either of the candidates until the technical question is definitively settled.

THE LONDON WATER COMPANIES.

PROFESSOR FRANKLAND, in the monthly report for November of his analyses of the waters supplied to the metropolis by the various companies, gives an instructive table showing the relative degree of impurity of each company's water. Thus, taking unity to represent the amount of organic impurity in a given volume of the Kent Company's water, we find the proportional amount in an equal quantity of water supplied by each of the other metropolitan companies. From this table we learn that the Grand Junction Company's water contains nearly, and the West Middlesex more than double, the amount of organic impurity contained in the excellent and abundant supply furnished by the Kent Company. Why should the inhabitants of West and North-West London be supplied with water of second-rate quality? All the metropolitan water companies pay good dividends, and their shares stand at a high premium. It was never intended that the water companies should thus grow rich at the expense of the public, and a Royal Commission is urgently called for to consider how far the majority of the metropolitan water companies have considered the public interests. One thing is very certain, that common sense ought no longer to permit a company to pay enormous dividends by supplying water of a second-rate quality. Either the charge on the public must be diminished or the company compelled to furnish water of a high degree of purity and also sufficiently abundant to afford a constant supply.

OUTBREAK OF CHARBON AT NEWCASTLE-ON-TYNE.

WE have received from Mr. Henry E. Armstrong, medical officer of health at Newcastle-on-Tyne, a paper which he read before the Northumberland and Durham Medical Society upon a recent outbreak of charbon among cattle in that town. All the instances were examples of so-called splenic fever, which is included under the same class as the better known malignant pustule. On the 27th of October Mr. Armstrong was called by the meat inspector to pronounce as to the fitness for food of the flesh of a cow reported to have been slaughtered in consequence of overfeeding. The flesh appeared healthy, the only noticeable feature being an unusual fulness of the bloodvessels, and the meat was passed. On the 28th a second carcass in the possession of a market butcher was seized and declared unfit for food; it was that of a cow from the same byre as the first, and was stated to have accidentally hanged itself in the stall. On the 30th the writer was again summoned to a slaughter-house to inspect the carcass of another animal which, with two of its fellows, had been taken suddenly ill; one had died, and this, with the third, had been slaughtered. Messrs. Stephenson and Elphick, veterinary surgeons, saw the animal with Mr. Armstrong, and pronounced it to be a case of charbonous or splenic fever. The flesh was firm but dark, and the bloodvessels were loaded with dark blood. There were extravasations of blood beneath the serous membranes, into the intermuscular tissue, and beneath the gastric mucous membrane, and also a large number of subpericardial and endocardial ecchymoses. The blood was dark and fluid. The spleen had not been preserved. At the same time another animal in a different byre had been killed by its owner for sudden illness. In this case the spleen was obtained. It was three times the natural size, and loaded with tarry blood. Other instances occurred in rapid succession, both in the same byres as the foregoing and in others in the town, and in all (up to November 8th) twelve cows and three horses had died from this disease; one of the latter with the form of charbon known as "glosso-anthrax." Mr. Armstrong sums up the morbid appearances as consisting in a marked fluidity of the blood, which was of purplish-chocolate tint, and in one case contained bacteria; in hæmorrhage from mucous surfaces, and into the tissues in all parts, with marked engorgement and enlargement of the spleen; the viscera underwent rapid decomposition. The symptoms are given as commencing with refusal of food; muscular weakness, so that the animals could not stand on their legs nor hold up their heads; bristling coats, and dull eyes; in some there was great restlessness; others appeared to suffer much pain; some passed bloody fæces and urine; and in all there was rapid collapse, the fatal issue being, in two instances, preceded by violent convulsions. Mr. Arm-

strong adds an account of a presumed case in the human subject. It was that of a butcher, who, after having dressed one of the diseased carcasses, was seized with gastro-enteritis. The patient was prescribed for by Mr. May, surgeon, on October 31st, the day following the seizure, and he seemed to improve; but on Nov. 2nd was attacked with convulsions, and died. Unfortunately an autopsy could not be obtained. The man does not appear to have wounded himself when dressing the carcass; but confirmatory evidence of its being a case of splenic fever was found in the fact that black patches appeared on the skin of the extremities and in various parts of the body, and there was oozing of blood from the nostrils.

This outbreak of splenic fever appears, says Mr. Armstrong, to be closely connected with the use of some coarse reedy-looking hay, grown on marshy ground, at a farm in the country where the disease had been prevalent about the beginning of the present year. In all the instances, with the exception of two, the animals attacked appeared to have been fed on this particular hay. This accords with the statements of Continental writers.

SANITARY AUTHORITIES AND MEDICAL INFORMATION.

As an excuse for their ill-success in limiting the extension of epidemics, sanitary authorities are accustomed to say that they do not get early information of cases of infectious sickness from medical men. A case has just occurred in Middlesborough, where a medical man, Mr. Vietch, was kind enough to give information to the inspector, of a case of what he called "Variola simplex," requiring immediate removal to the Fever Hospital. The inspector took advantage of the Latin name to do nothing. We certainly disapprove of latinity in regard to either small-pox or scarlet fever. It is eminently a case for plain English, for calling a spade a spade. But the inspector is without excuse. An inspector ought to know what variola means, and if he does not, and learns from a medical practitioner that it is something needing removal to a Fever Hospital, he should set about obtaining information, and getting the patient removed as soon as possible. Thereafter he should send a polite note of thanks to his medical informant. What made matters more discreditable here was that the inspector, instead of being rebuked, was supported by the Sanitary Authority.

SCHOOL-SHIPS.

AN epidemic of a scarlatinal character has broken out on the *Cornwall* school-ship, off Purfleet, during the last three weeks. This ship suffered last year from a very protracted epidemic of enteric fever, which attacked about 40 per cent. of the inhabitants of the ship. In this last case, as soon as the epidemic nature of the disease was discovered by the Port Sanitary Authority, the boys were removed to the Seamen's Hospital at Greenwich. The *Cornwall* authorities, although the epidemic of last year cost them, according to the remarks of their chairman, £3000, do not appear to have profited much by experience; for no hospital accommodation has been provided, nor any means of removing the sick. This particular ship is under the control of the Home Office, being established for the reception of boys who would otherwise be in prison. But the Home Office authorities seem to be indifferent about the matter; for no assistance or even practical advice has as yet emanated from Whitehall with reference to these disastrous outbreaks. The position of the *Cornwall* as a school-ship establishment is, as we take it, most humiliating. She is partially supported by a Government grant, and partially by voluntary contributions. She is, according to Mr. Cave's speech, delivered at the annual meeting last week, practically bankrupt, and in the presence of a second epidemic; but has no money to pay debts, or to deal properly and energetically with the outbreak. It is possible that another £3000 will be spent, and much sickness and misery experienced. Meanwhile, the Home Office contents itself with a perfunctory periodical inspection, and does nothing. It is manifestly the duty of this Department either to give substantial aid in such an emergency, or to close the establishment as speedily as possible.

ACCIDENTS TO RAILWAY PASSENGERS.

THE constantly recurring form of accident in which a passenger falls between the train and the platform should induce the railway companies to seriously consider the urgent need of providing a broad continuous footboard which would render it impossible for persons to be precipitated in the manner described. There can be no insuperable difficulties against the adoption of such a plan. It works well on many of the Continental lines, and has been the means of greatly diminishing the number of fatal accidents. A report issued this week states that in the three months, July, August, and September, eighteen passengers were killed and thirty-eight injured by falling between trains and platforms, and three were killed and ninety-six injured by falling on to the platform while getting into or alighting from carriages. It is so evident that a large saving of life and limb would be effected by an improvement of the nature suggested, that it is somewhat surprising the subject has not been brought before the notice of the Legislature. An independent member of the House of Commons has here an excellent question to work up for next session. It could not fail to command attention, nor could the ultimate successful issue of so praiseworthy an undertaking be doubted.

SANITARY WORK.

THE Board of Works for the Lewisham District is as to many matters somewhat in advance of the district local authorities in and about London. They have recently provided a hospital for the reception of the sick, especially intended for persons suffering from contagious or infectious diseases, an ambulance suitable for the conveyance of such persons, and an apparatus for disinfecting the clothing, bedding, and other things likely to be contaminated in such cases. It is notified that the use of the hospital may be had on payment of certain small fees fixed by the Board, and that the ambulance may be borrowed on payment of the expense incurred for horse-hire only. All persons resident in the district are entitled to make use of the disinfecting apparatus free of charge, and a fee of five shillings is charged to non-residents. In cases where persons are unable to defray the expense of removal or reception into the hospital, such expense will be borne by the Board.

We commend this practical mode of action to the notice of other metropolitan and urban sanitary authorities.

DIVIDED AUTHORITY IN WORKHOUSES.

MR. EDWARD H. FULLER, of Withington, Manchester, one of the guardians of the Chorlton Union, has resigned his office in consequence of the refusal of the Local Government Board to inquire into the management of the pauper infirmary attached to the Chorlton Union Workhouse. Mr. Fuller regards the workhouse as really a home for infirm people requiring medical treatment and consideration. This being so, he thinks it of prime importance that the sick, with their nurses, diet, clothing, exercise, and apart-

ments, should be placed under the separate control of a resident medical officer, free from the interference of the workhouse master. Mr. Fuller is right, and time will show that the Local Government Board is wrong in refusing to inquire into cases where the medical officer is thwarted in the discharge of his duties by an officer who, in the nature of things, must be unfitted to control him.

HONORARY DEGREES AND THE GENERAL MEDICAL COUNCIL.

AT the annual meeting of the British Medical Association in Dublin, in August, 1867, as reported in THE LANCET of the 10th of that month, p. 179, the honorary degree of M.D. Univ. Dub. was conferred on the following registered practitioners—viz., Henry Wyldbore Rumsey, Francis Sibson, James Young Simpson, William Bowman, James Syme, Thomas Pridgin Teale, George Edward Paget, and Henry Wentworth Acland. On reference to the Medical Register it will be seen that five of them—viz., Messrs. Rumsey, Syme, and Teale, and Drs. Paget and Acland, were allowed to register such additional qualification. Why, therefore, the honorary degree of M.D. of the Queen University in Ireland cannot be registered, as the Branch Council for England have decided, is not clear. If they are right now, they were wrong before; and some explanation ought to be given of the matter.

THEATRES AND FIRES.

IT is pleasant to be informed that the Lord Chamberlain has the need of enforcing special precautions against fire during the pantomime season clearly in view. It would be still more satisfactory to be acquainted with the precise instructions his Lordship has issued. We believe a circular of some sort is addressed to the managers every season. Has that now indited any peculiar features? It is manifestly easier to administer consolation to the public than to protect public interests effectually. There is an exceptional need that something should be done; but if this need is to be satisfied by simply entreating the lessees of houses constructed like too many of those within the metropolitan district to take "every precaution," we fail to see how the performance of this paternal function can afford any solid ground for confidence. In a word, managers cannot alter the plan of their houses, and the opening of a few doors would do uncommonly little. It is idle to talk of protecting the public when the public has once got into the trap. Playgoers must protect themselves and their families; and the only way, under existing circumstances, that can be done, would seem to be by planning a safe retreat—in plain truth, keeping the contingency of a panic distinctly before the mind, and thinking beforehand how to act. This is a sorry recommendation, it may be, but it is vain to put any trust in the well-meant but feeble efforts of the Lord Chamberlain, for whose intervention it is customary to make an annual sensational appeal. The opportunity for efficient precaution is practically at an end when a theatre is licensed.

INDIAN QUININE.

WE lately announced the successful cultivation of the chinchona bark in many fresh hill districts of India, and ventured to predict that the medical officers in the country would ere long be able to rely entirely on the native products in the treatment of certain fevers. It would appear, however, from recent experiments that the mixed chinchona alkaloids are of such sparing solubility, and have, moreover, so strong a tendency to produce gastric irritation, that their administration in many cases is precluded. The *Pharmaceutical Journal* devoted last week an article to the consideration of the subject, and quoted extracts from a report presented by Surgeon-General G. Smith to the Chief Secretary, in which the results obtained from the treatment of fever with the mixed alkaloids are given. Two pounds of the drug were sent to twelve hospitals for trial, and returns from ten of them are embodied in Dr. Smith's report. The doses in which the preparation was exhibited ranged from five to twenty-five grains. In the larger doses it was found to produce chinchonism and intestinal disturbance of an aggravated form. One medical officer reports that he found it caused so much sickness, giddiness, and prostration that he would not recommend it for general use. As an illustration of its insolubility, we may state that in one experiment three drachms of dilute hydrochloric acid failed to make one drachm of the powder dissolve in two ounces of water. Most of the patients submitted to treatment were suffering from mild uncomplicated cases of intermittent fever. On the whole, Surgeon-General Smith concludes that the results obtained in the trials of the preparation have not been such as to warrant a recommendation of its general use. There are supposed to be several tons of the mixed alkaloids now in store, which will very likely be shipped to Europe at a cheap rate.

MODE OF ELECTING HOUSE-SURGEONS.

IT is gratifying to notice the steady progress in opinion as to the mode of electing the principal paid officers of hospitals. The last instance of this is reported in reference to the Taunton and Somerset Hospital. At a special general meeting of the governors, Mr. Rawlinson, in the absence of Prebendary Sandford, proposed that the General and Medical Committees shall form a united committee for the election of house-surgeon, matron, and head nurse, when vacancies occur. Mr. Rawlinson quoted THE LANCET in favour of this change. We very strongly recommend it to every institution which has not already made it. To send house-surgeons, in the impecuniosity of the period which follows qualification and precedes practice, to canvass a large body of governors, extending often over a whole county, is an injustice and an indiscretion not admitting of defence. It must exclude many of the best men from the candidature. Whereas election by the General and Medical Committees together is an admirable method for securing that the best judgment shall be brought to the selection of a candidate.

A WORD IN SEASON.

THE report of the death of the wife of a clergyman at Chatham, from small-pox, contracted while visiting the sick in the parish—the unfortunate lady had been married only eighteen months—leads us to give a word or two of advice to those similarly engaged. We should be sorry to say anything of a nature to damp the ardour of lady visitors to the homes of the sick poor. Those members of the profession whose duties take them into the most wretched and squalid quarters of our metropolis will testify to the courage and devotion with which ladies carry on the noble work of succouring the sick and distressed, and acknowledge the assistance they often receive in this manner in the treatment of disease. It may not, however, be out of place to remind district visitors that, at a time when small-pox is so widely prevalent, the utmost care and precaution should be observed to secure their persons against infection. We assume that all whose self-imposed duties carry them into suspected quarters have already submitted themselves to revaccination. Two other preservative measures, disinfection and fumigation, should be practised as far as possible. With regard to the disinfection of rooms lately occupied by persons with infectious disease, no better agent could be

used than the bisulphide of carbon, which on ignition evolves sulphurous acid in vapour. The substance is not costly, and may be burnt either in an ordinary spirit lamp or in an open dish. It should be used with caution, as it is extremely inflammable.

THE PATHOLOGICAL SOCIETY.

THE annual general meeting of this Society will take place on the 2nd of January, when the officers and Council for the ensuing year will be elected. As already announced, the meeting on Tuesday, Jan. 16th, will be set apart for the exhibition of specimens illustrating the pathology of Visceral Syphilis. We understand that the Council are desirous that the specimens brought forward should illustrate something new or unusual in the histology of the disease, although specimens of interest in other respects will be welcome. Gentlemen intending to exhibit are requested to send in their names, with the subject of their intended communication, at once to the medical secretary.

SICK-PAY AND POOR-RATES.

IT is alleged that under the Poor-law Amendment Act of last session guardians have a claim on the sick-pay allowed to members of friendly societies if they fall ill and must needs go to workhouse or asylum. This is scarcely a wise arrangement, because, as asserted by a deputation of Foresters, who waited upon Mr. Salt, the parliamentary Secretary of the Local Government Board, the other day, these societies saved the rates in the aggregate a great burden, and any measure which might deter men from paying their subscriptions regularly would be unfortunate, and, in its remote effects, disastrous. Mr. Salt is of opinion that the provision in the Act applies only to the case of a man in the habit of getting drunk and becoming chargeable to the parish, receiving his club money after recovery and spending it in drink. However this may be, friendly societies appear to have the remedy in their own hands by framing a rule that no member receiving relief from the rates shall have any claim on the sick fund. Such a rule would, no doubt, be sanctioned by authority, and it would, of course, render any claim which the Act of last session may give boards of guardians entirely nugatory.

THE ARCTIC EXPEDITION.

WE are entirely in accord with a correspondent who writes to *The Times*, suggesting that a select committee should be appointed to inquire, not only into the causes of the outbreak of scurvy on the last Arctic Expedition, but into the subject generally. So much has been said and written upon the subject that the main question at issue has by many been entirely lost sight of, and the public have yet to know from official sources the exact text of instructions that emanated from the office of the Medical Director-General of the Navy previous to the departure of the ships last year. If a select committee be appointed to determine the proximate and predisposing causes of scurvy it should, of course, include some members of the mercantile marine. For, as we have before indicated, it seems now that the tables are turned, and that the Admiralty may profitably take a leaf out of the book of the marine department of the Board of Trade.

THE CASE OF "DR." HAMILTON.

WE are glad to know that we shall soon learn whether the ruling of Mr. Knox as to the use of American titles for purposes of medical practice is to be regarded as valid or otherwise in this country. The East London Medical Defence Association has appealed against Mr. Knox's ruling, and the question will be argued in the Court of Exchequer. The profession is under very great obligation to the East London Medical Defence Association for taking means to determine a question which the apathy of our corporations and of the General Medical Council would leave undetermined indefinitely.

CLINICAL FEES AT UNIVERSITY COLLEGE HOSPITAL.

WE congratulate the medical and surgical staff of this hospital on the concession by the Council of the College of two-thirds of their clinical fees. Hitherto the whole of the fees have been given to the hospital, but the medical officers have recently felt that they were not justified in giving up the whole sum, and have at last decided to allow the Council to retain one-third to be given to the charity.

DR. ORME DUDFIELD, medical officer of health for Kensington, in his last monthly report, states that since the issue of his previous return thirteen cases of small-pox had come under his observation, twelve of which occurred in the north district. Nine cases occurred in two adjoining houses in Lonsdale-road. In the same period two deaths from enteric fever were recorded in the parish. In the case of a patient who was removed to the Fever Hospital and there died, the disease was traced to an escape of sewer-gas from a soil-pipe constructed of glazed earthenware, placed in a wall, and thinly covered with plaster. The smell was very offensive, and on examination it was found that the joints of the pipe had never been closed. Dr. Orme Dudfield points out the evil of the practice of embedding soil-pipes in certain parts of walls, often to the common danger of two households.

THE *Pall-mall Gazette* quotes some remarkable illustrations of the way in which disease is spread, from a paper by Dr. Cornelius FOX, medical officer of health. In one case a publican's wife attended to her children ill with scarlet fever and to her husband's customers with equal assiduity and impartiality. As a consequence, the disease soon ran riot throughout the neighbourhood. Another instance was the refusal to close temporarily a village school where measles was prevalent. In one case small-pox existed in a restaurant, "the characteristic odour of the disease pervading the bar where men stood drinking." Again, a tailor made clothes for people while enteric fever prevailed in his house, and thus distributed the infection. Several other instances are given by Dr. FOX, all of which demonstrate the need of granting greater powers to sanitary bodies.

DR. CAMERON, M.P., in an admirable address delivered last Saturday before the Glagow Andersonian Medical Society, strongly condemned the Act passed last session for regulating the practice of vivisection. He contrasted the amount of cruelty attaching to a few experiments undertaken for the purposes of scientific inquiry with that involved in a battue of game, such as took place recently near Thetford. We should like to see our respected member more frequently explain his views publicly on matters having especial interest to the profession.

OWING to the prevalence of scarlatina at Chilvers Coton, a thickly populated village in Warwickshire, the various Church of England, Dissenting, and Roman-catholic schools in the parish have been temporarily closed. This course has, we understand, been pursued on the recommendation of Mr. Pitt, the medical officer of health, and is one which may be recommended for adoption in other crowded localities where epidemic diseases prevail.

A GENERAL meeting of the members of the Sanitary Institute of Great Britain was held last week at their rooms in Spring-gardens, when the report of the committee was presented. The committee recommend that for the present the examination of, and granting certificates of qualification to, subordinate officers of sanitary districts should be held in London, and for two classes only—viz., for local surveyors and inspectors of nuisances, whose examinations "should comprise the elements of Sanitary Science, together with engineering, the laws relating to the suppression of nuisances injurious to health, and for the prevention of disease." The committee also, *inter alia*, urge the desirability of the Institute taking steps to procure a complete registration of sickness, especially zymotic disease.

PUBLIC attention is again called to the defective sanitary condition of the public schools situated in Plumstead. We find it stated in a lately issued report that the closets in the Board schools at Church-terrace are very dirty and the urinals unsatisfactory; at the Central schools the closets are very dirty and dilapidated, and the playgrounds are unpaved and very offensive in wet weather, with stagnant pools about; and that the arrangements at the Slade schools are still more objectionable. The sanitary authority of the district should take the matter up, and insist that the much needed improvements, which can be easily specified, should be carried out at once by those who are responsible for the state of the establishments.

A MEETING of commanding officers and surgeons of Volunteer corps was held a few days ago at the Royal United Service Institution, for the purpose of taking measures for organising the training of volunteers for the duties of sick-bearers in the battle field on the system adopted in the Army Hospital Corps. The meeting was addressed by Surgeon-major Sandford Moore, and a discussion ensued, resulting in the adoption of two resolutions—one expressive of the readiness of Volunteer surgeons to undergo the necessary training if opportunities are given them, and the other of a desire to obtain the views of the Secretary of State on the subject. We have more than once commended the present movement, and are glad to see it in motion, even if slowly.

PROFESSOR HUXLEY, in an address upon Biology, delivered at the South Kensington Museum on Saturday evening, drew attention to the possible use of the study in relation to ascertaining the true nature of the germs of infectious disease. He pointed to the revolution in agriculture during the last forty years, and glanced at the precise definition of certain processes which go on in plants, and which are part of the subject of biology. Granting the use of studying biology, Mr. Huxley argued that mere reading was of little value without actual observation and experiment. He saw no valid reason why it should not be part of an ordinary school training, and especially was it commended to those who followed the profession of medicine.

CERTAIN courts and alleys in Westminster, which have long been recognised as hotbeds of crime and disease, are in course of being "improved" away by the operation of the Artisans' Dwellings Act. In Whitechapel, application has been made to the Secretary of State for the Home Department to appoint an arbitrator between the Board of Works and the persons interested in the lands and hereditaments to be taken compulsorily for the purposes of the Metropolis (Whitechapel and Limehouse) Improvement Scheme, 1876. We expect to find in the provision of cleanly, wholesome, and well-ventilated dwellings for the working classes a beneficent influence from which the best moral as well as physical results will accrue.

MUCH interest continues to be shown at Manchester in the question of what is to be done with the Royal Infirmary of the town. Among the profession there would seem to be a balance of opinion in favour of a new site. Fifteen out of the sixteen physicians and surgeons attached to the institution have reported to the trustees their decided conviction that the structural defects of the building are of so grave a character that no amount of alteration can render it efficient for the satisfactory treatment of patients, and that they consider it absolutely necessary to pull down the present infirmary, and to construct one of larger dimensions and on improved principles, "either on the present site or on any other which may be deemed more desirable."

A SAD affair occurred at the South Staffordshire Hospital at Wolverhampton on Saturday last. A man named Skitt, who had one of his fingers crushed, went to the hospital to have it attended to, and it was decided to remove the first joint. The house-surgeon administered chloroform, and the assistant-surgeon was about to operate, when it was discovered that breathing had ceased. Skitt was a man of more than ordinary physical strength.

SMALL-POX has been prevalent in Chatham for some time, and the disease shows no signs of abatement. Stringent measures are taken by the military authorities to protect the health of the troops. They are periodically inspected, and those requiring it are revaccinated, together with their wives and children, while the men are forbidden to enter certain public-houses which are supposed to be infected.

ON Saturday last the Dundee Convalescent Home—the funds for building and endowing which had been left by Sir David Baxter, uncle of Mr. W. E. Baxter, M.P. for the Montrose burghs—was formally opened. It will provide accommodation for fifty patients. A sum of £10,000 was expended on the building, and it has a maintenance fund of £20,000.

THE health authorities of Broadstairs are taking the wise step of providing a complete system of drainage for the town. Such a measure, although it involves a considerable outlay at first, will be found economical in the end, as the mortality will be diminished and the reputation of the place as a healthy seaside resort increased.

IT is announced that the parliamentary grant of £2000 a year for scientific investigations into the "causes and processes" of disease is in future to be placed at the disposal of the Royal Society. Heretofore this endowment of research was controlled by Mr. Simon, as medical officer of the Privy Council.

THE occurrence of a severe outbreak of small-pox in a poorly inhabited part of Stepney has been reported, seven persons having been attacked in one house alone. Many of the patients have been sent into hospital, and the premises which they had occupied thoroughly disinfected and fumigated.

IT was determined at the meeting of the Metropolitan Asylums Board on Saturday to erect six additional pavilions at Fulham, and seven at Deptford, for the purpose of providing accommodation for nearly 800 small-pox patients, the estimated cost being £41,705.

DR. MACKINTOSH, medical officer of health for Chesterfield, reports that the rate of infantile mortality in that town is as high as 55 per cent. A large amount of the fatality recorded is attributed to a general use of dangerous "soothing" medicaments.

DR. ANGUS SMITH, F.R.S., and Mr. Robert Rawlinson, C.B., have been appointed by the Local Government Board inspectors for the purpose of granting certificates under the Rivers Pollution Prevention Act, 1876.

TYPHOID FEVER has broken out among the crew of the guardship *Valiant* in Foynes Harbour. An application has been made to the governor of a local hospital to accommodate fifteen cases.

FRESH cases of small-pox continue to be reported in Liverpool. Last week fifteen deaths from the disease were recorded.

THE SMALL-POX EPIDEMIC.

THE fatality from small-pox in London has, with slight fluctuations, increased steadily since the beginning of October, and the 75 deaths from the disease registered during the seven days ending 16th considerably exceeded any weekly number since the decline of the epidemic in 1870-1-2. These 75 deaths showed an increase of 25 upon those returned in the preceding week, most of which increase occurred in South London, to which 31 of the 75 fatal cases belonged. After distributing the hospital cases, the Registrar-General's last weekly returns showed that 11 of the deceased small-pox patients had resided in Hackney, 8 in Lambeth, 8 in Camberwell, 5 in Islington, 4 in Bow, 4 in St. Pancras, 4 in Wandsworth, and 4 in St. Saviour's, Southwark. The marked increase in the recorded fatal cases was not, however, the only unfavourable feature of the last return. The number of small-pox patients under treatment in the Metropolitan Asylum Small-pox Hospitals at Homerton, Stockwell, and Hampstead, which in the seven preceding weeks had steadily increased from 185 to 586, further rose to 696 during the week ending the 16th. Accommodation for this additional number of patients had in great measure been provided by the transferrence of the fever patients from the Homerton Fever Hospital to the similar institution at Stockwell. Bearing in mind that during the first half of this year only 33 deaths from small-pox were registered in London, the increase in the numbers has been far more rapid than it was at the commencement of the last epidemic; during the three months ending September 110 fatal cases were recorded, and in the eleven weeks ending 16th, 420 further cases. It is scarcely possible to believe that the present epidemic can, in a more generally vaccinated population, assume the same proportions as did the last; but in the face of the recent ominous increase in the number of cases and of deaths, it is well to remember the fact that in 1871 no less than 7876 small-pox deaths were registered in London, and at the crisis of the epidemic, in the early part of May of that year, 288 occurred in one week. Notwithstanding the increase of hospital accommodation the proportion of fatal cases in private dwelling-houses continues between 40 and 50 per cent. It is evident, therefore, that the Metropolitan Asylums Board is bound rapidly to increase their number of beds for small-pox patients, and it is to be hoped that they will meet with cordial support both from the Government and the public in their thankless task. The assistance of the public may be rendered in two important directions—by practically recognising the importance of revaccination, and by not offering litigious local opposition to every site proposed for temporary hospital accommodation. Local sanitary authorities can render most valuable assistance by adopting all possible means for daily information to their medical officers of health of new cases of small-pox, in which effort the co-operation of all medical practitioners can doubtless be counted upon.

Around London the most noticeable feature with reference to the prevalence of small-pox is the occurrence of four fatal cases in the infectious wards of the Croydon Workhouse during the week ending the 16th inst. Two were also recorded in the district of West Ham.

Much exaggeration appears to have prevailed with regard to reported outbreaks of small-pox in various parts of the country, but judging from a few facts published by the Registrar-General, the outbreak at Bromley is the only one that has assumed serious proportions. In Bromley seventeen deaths occurred between the end of September and the 16th inst.; three were registered in Swansea, two in Kendal, and one each in Blackburn and Haslingden. No death in Chatham was registered prior to the 16th inst. London, Liverpool, Manchester, Salford, and Bromley, appear to be the only towns in which the disease has assumed an epidemic character, and it may yet be hoped that the epidemic may not become general, as it did in 1871-2.

Correspondence.

"Audi alteram partem."

DIAGNOSIS OF INTRA-THORACIC TUMOURS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Nov. 18th, 1876, are published some "Clinical Remarks on a Case of Mediastinal Cancer with Aphonia from Laryngeal Paralysis," by Dr. Burney Yeo. In his comments on the case he lays considerable stress on the use of the laryngoscope in the diagnosis of these tumours, and, as a very similar instance was lately under my own care in St. George's Hospital, I venture to send you a brief extract from the notes in case you should think them worthy of publication. At the same time, I do not know that I should have troubled you with a communication on this subject had it not been for the concluding paragraph of Dr. Yeo's lecture, wherein he says: "The chief point of interest in this case, and that to which I wish to call attention in placing it on record, is the aid which was afforded us in our diagnosis by the use of the laryngoscope, whereby we were enabled at once to discover that the loss of voice was not caused by intrinsic disease of the larynx itself, but by disease within the thorax interfering with the innervation of the laryngeal muscles." This fact has, I think, been long recognised by the profession, and no physician who had a case in which any alteration in the force or character of the voice existed would, I imagine, fail to have recourse to the laryngoscope in order that any doubt which might exist as to intrinsic or extrinsic disease of the larynx might at once be set at rest. My own case so closely resembles Dr. Yeo's that it seems to be a fitting supplement to his lecture.

Charlotte R——, a married woman aged thirty-seven, was transferred to my care by Dr. Cavafy on October 20th, 1875. Her history was briefly as follows. She had enjoyed good health until June, 1875, when she was attacked with a bad cough and spitting, which symptoms subsided in the course of a week, but from that time she suffered from constant pain in the upper part of the left chest, both in front and behind. She had for a short period before her admission into St. George's Hospital wasted considerably—i. e., she had lost in six weeks three pounds in weight.

On her admission she was decidedly emaciated; had slight sore-throat, but no cough or expectoration; complained of pain over the upper half of the left chest, anteriorly and posteriorly; her voice was reduced to a whisper; her tongue was clean, though she suffered from obstinate constipation.

On Oct. 22nd I examined her with the laryngoscope, and found total paralysis of the left vocal cord, but no other abnormal appearance in the larynx. The left chest was wanting in movement on inspiration, and was markedly dull on percussion in front over the upper part of the lung. Similar dulness existed behind; while over the scapular region percussion resonance was, if anything, greater than natural. The bases of both lungs were dull on percussion, but on the right side breathing was distinctly audible; while over the left lung generally respiration was extremely feeble, and at the upper part quite inaudible. No tubular breathing could be detected on the right side, nor were there in the thorax any moist or dry sounds. Vocal fremitus was entirely absent on the left side. The heart's apex beat about one inch to the left of the sternum, and not below its

normal position; the base of the heart extended to about half an inch to the right of the sternum. The sounds were clear and natural.

Oct. 29th.—Sonorous rhonchi were heard over the right lung in front; and on the left side both in front and behind; the bases were a trifle more resonant, and more air seemed to enter the left base than at the previous examination; otherwise the left chest remained *in statu quo*. It appeared, on inspection of the two sides of the thorax, that the left was the smaller; measurement, however, proved that no difference existed. The diagnosis was that the patient was the subject of an intra-thoracic malignant tumour, which, by pressure on the left recurrent nerve, had caused paralysis of the vocal cord. The patient rapidly lost flesh, and on November 3rd experienced some difficulty in swallowing; the food appeared "to stick" at the sternal notch, and was immediately vomited. She died on November 4th.

At the examination of the body, twenty-four hours after death, bloody fluid was found in both pleural cavities, but in no great amount, and less in quantity on the left side. A large, soft, white growth lay in the mediastinum, immediately behind the sternum, which had involved the right lung to the depth of about one inch, while the left was generally infiltrated; the root of this lung was completely surrounded by the tumour, and the left recurrent nerve was so disorganised, as it passed through the mass, that its dissection was rendered impossible. The heart was natural. The laryngeal muscles on the left side were about half the bulk of those on the night, and microscopic examination showed them to be so altered that almost all traces of normal voluntary muscular tissue had disappeared—structureless granular bands, merely, representing the original muscular fibres. To the naked eye the new growth was white, soft, and for the most part brain-like in character; microscopically examined, it prove to be an alveolar sarcoma.

In such cases the laryngoscope, as has been demonstrated by various observers, assists the diagnosis, not only in showing the absence of laryngeal disease, but also, when such unilateral paralysis exists, in guiding the practitioner in his search for the original disease to deeper parts within the cavity of the thorax where pressure on or other interference with the motor nerve to the part may exist. In this way previously unsuspected aneurisms have been discovered. The unilateral paralysis of the vocal cord, as shown by the laryngoscope, has led to an examination of the chest, where the real seat of the disease existed.

It does not, however, always happen that the laryngoscope thus enables us to form a certain diagnosis, and of this a case which died under my care a few days ago at the Morley Convalescent Hospital at Wimbledon affords a good example. The patient was a woman aged forty, who had spent the last eleven years in India, where she had suffered from dysentery. She was admitted into St. George's, under Dr. Cavafy, for dyspnœa, cough, and pain in the right side of the chest, and the note made at the time of her admission (June 2nd, 1876) was as follows: "There appears to be some laryngeal stridor, and the cough is slightly laryngeal in character; musical râles all over the chest, inspiration prolonged under the left clavicle, with some dulness on percussion." The apex beat of the heart was scarcely perceptible; there was a soft systolic bruit audible over the aortic valves; no abnormal dulness could be detected on percussion, save that already mentioned as existing behind the left clavicle. Laryngoscopic examination showed complete paralysis of the left vocal cord, which maintained a permanent position about midway between perfect adduction and abduction. During her residence in St. George's, and subsequently at Wimbledon, she was liable to attacks of dyspnœa on slight exertion, and eventually the breathing at the left apex became tubular, while the vocal fremitus remained about normal. The voice was so husky that vocal resonance was inappreciable in any part of the chest. On August 12th a gumma appeared on the right leg, which ulcerated, but eventually healed under iodide of potassium. The laryngeal stridor, however, steadily increased, and she became liable to spasmodic attacks of dyspnœa on awaking in the morning. On Nov. 3rd she had a severe attack of dyspnœa; on Nov. 4th passed a very restless night, owing to difficulty of breathing. Next day bronchitic râles were audible over the whole chest, and copious expectoration of purulent matter commenced. On Nov. 6th the percussion was dull, and respiration diminished over the left side, and she had a severe attack of dyspnœa, which lasted about two hours, and in the course of the day a similar attack. These symptoms became so urgent that a thorough examination (according to the report of Mr. R. P. Collyns (the resident medical officer at the convalescent hospital) was impossible. On November 10th she was much worse, and the copious expectoration ceased. She died next day at noon. At the post-mortem examination pleuro-pneumonia was found affecting both lungs, and in addition acute inflammation of the bronchial tubes. There was an aortic aneurismal sac of the size of an orange communicating with the aorta by an orifice an inch and a half in diameter. It arose behind the innominate and left subclavian and carotid arteries. The left recurrent nerve was passed over the most projecting portion of the sac, which had compressed the left bronchus considerably. The tissue of the nerve was so altered that nothing but the neurilemma was left.

The diagnosis in this case was that of aortic aneurism, and this opinion was based chiefly on these two facts—viz., the paralysis of the left vocal cord, and on the systolic murmur heard over the base of the heart. Paralysis of the vocal cord demonstrated clearly that there was some tumour which, by its pressure, had interfered with the innervation of the laryngeal muscles on the left side, and although the aortic murmur indicated the probability of aneurism, all all other diagnostic signs of that disease were wanting.

I am, Sir, yours faithfully,

THOS. WHIPHAM, M.B., F.R.C.P.,
Assistant-Physician to St. George's Hospital.

Green-street, Nov. 25th, 1876.

MEDICAL WOMEN.

To the Editor of THE LANCET.

SIR,—In your impression of the 9th ult., under the head of "Annotations," I find the following paragraph:—

"The King and Queen's College of Physicians in Ireland, on the 1st instant, in accordance with their resolution a month ago in favour of Miss Peachy, decided to admit Miss (or Mrs.) Dunbar, M.D. of Zurich, to the examinations for the licence of the College. This step was resisted strongly and unanimously by the obstetrical (*sic*) members of the College, but without effect."

The person who supplied you with this information should have been more exact. As the last sentence stands, one would suppose that the obstetric Fellows of the College had made an organised resistance against the admission of ladies to the licence of the College. Such was not the case. Your informant would have been more accurate had he said the step was "resisted," &c., by the obstetric members of the College *who were present at the meeting*.

There are eight Fellows who practise obstetric medicine, and three only of these were present. The meeting consisted of twenty Fellows, and but sixteen of these voted. The members were equal—eight to eight—and the President gave his casting vote, very properly, in favour of the lady. I was prevented from attending, having had other duties to perform in connexion with my chair. Had I been present I should have strenuously supported the motion for the admission of Miss Dunbar. By inserting this in your next impression you will much oblige, Sir,

Your obedient servant,

EDWD. B. SINCLAIR,
King's Professor of Midwifery.

Dublin, Dec. 16th, 1876.

THE GENERAL MEDICAL COUNCIL AND THE EAST LONDON MEDICAL DEFENCE ASSOCIATION.

To the Editor of THE LANCET.

SIR,—From 6th October, 1875, to 12th July, 1876, we were frequently promised by the Medical Council that the whole or part of any penalties we might recover under the Medical Act should be handed over to us towards defraying the expenses of any prosecutions we instituted.

We charge the Medical Council with having made these promises, whilst at the same time they knew that the penalties were claimed by the Receiver of Police—that he had, in fact, before claimed them, and detained them; and that, in

consequence of such detention, an unsuccessful application some years since had been made by the Medical Council to the Home Secretary asking him to direct the magistrates to order the penalties to be paid over to the treasurers of the Council. We wished to have an interview with the Medical Council at their meeting last week to discuss the matter with them, to ask them to give us permission to sue the Receiver of Police in their name for the recovery of the penalties in his possession, and to promise, at the same time, although they have £35,000 invested and £2000 in cash, to hold ourselves solely responsible for the costs. How we succeeded in our wishes the correspondence which I hold, and which I fear your space will not permit you to publish, shows.

I am, Sir, your obedient servant,

R. H. S. CARPENTER,
Hon. Sec. East Lond. Med. Defence Association.

December 9th, 1876.

TEST FOR BILE.

To the Editor of THE LANCET.

SIR,—In a note in THE LANCET for December 16th you draw attention to the method of testing for bile in urine by means of tincture of iodine. I have used this test for nearly ten years, my first knowledge of it having been gained from Flint's Practice of Medicine. I have found it best to place two or three drops of iodine liniment in a test-tube, and then to add about two drachms of the suspected urine. If the colouring matter of bile be present the mixture will assume on agitation a brilliant sea-green colour. This is a ready and reliable test, and one which I have long preferred to all others with which I am acquainted.

I am, Sir, yours, &c.,

JAMES SAWYER, M.D., Lond.,
Physician to the Queen's Hospital, Birmingham.

Temple-row, Birmingham, December 16th, 1876.

THE CASE OF DRANT.

To the Editor of THE LANCET.

SIR,—Permit me, in the name of science, and in the name of humanity and of common-sense, to thank you for your able article in this day's LANCET upon the case of "the convict" Drant.

The experience of thirty years in the special treatment of mental disease may go for what it is worth; upon the strength of it, at all events, I venture to endorse every word you have said.

The opinions you have so well expressed *must*, one day or other, prevail; whether in my lifetime or yours must still remain doubtful.

I am, Sir, faithfully yours,

JOSEPH SEATON, M.D.

Hallifford House, Sunbury, S.W., Dec. 18th, 1876.

Obituary.

JOHN GAIRDNER, M.D. EDIN.

WE have great pleasure in glancing back at the life of Dr. John Gairdner, which began so far back as the 18th of September, 1790, and which ended peaceably and gradually on the 12th inst. For the last three or four years the infirmities which age is so apt to bring had removed Dr. Gairdner from all active life; but this circumstance should not hinder us from reverting to a career so honourable and high-minded.

Dr. Gairdner was the son of Captain Robert Gairdner, of the Hon. East India Company's Service. His father died from the effects of an accident when John was but five years of age. This involved the removal of his mother to Ayr, and finally to Edinburgh, where he graduated in 1811. Thereafter he spent a year in study in London, under Mr. (afterwards Sir Charles) Bell, and returning to Edinburgh, commenced practice there in 1813 in partnership with Dr. Farquharson. In 1813 he became a Fellow of the Royal College of Surgeons, and in 1817 one of the Examiners for that body. In the latter year he married his cousin, Susanna Tennant, who died in 1860. For half a century he was very intimately connected with the College, being its President from 1830 to 1832, during which time the new Surgeons' Hall in Nicholson-street was opened. The College has always been distinguished by liberal views, and amongst its members few were more influential in giving a liberal character to its proceedings than Dr. Gairdner. It is to him that the extra-mural school of Edinburgh is very much indebted for its recognition by the University and for its respectable position as a part of the great Edinburgh school. Dr. Gairdner was a frequent contributor of valuable articles to medical periodicals. Many of these were of an historical kind, in accordance with a marked feature of his mind. Others were of a clinical or pathological character. "An Historical Sketch of the Royal College of Surgeons of Edinburgh," "A Sketch of the Early History of the Medical Profession in Edinburgh," "On Infantile Erosions and Perforation of the Alimentary Canal," "On Carditis," "On an undescribed Abdominal Entozoon," "A Case of Epilepsy of twelve years cured by Valerian," are the titles of some of his numerous papers written at various times during a period of sixty years. Remembering his paternal relation to the distinguished Professor of Practice of Physic in Glasgow, it is not without interest to mark the title of another of his papers, "Peculiar Respiratory Diseases." He was a man of high public spirit, of pure life, of strong domestic affections, and one of those, not many, of whom it might be said truly that he never tried to gain an advantage for himself at the cost of others or of the public, being determined even to absent or repress himself where any considerations of private or social advantage might be supposed to influence him. It was inevitable that a man of such moral qualities should be influential, especially when by conviction and principle, he was in sympathy with all that is progressive in science and history. He believed in freedom—in politics, in religion, and in science. He had the courage of his opinions, and was a Liberal in Edinburgh, when to be a Liberal was to be in a minority, though a glorious one. The *Scotsman* in a long notice of his life, says:—"As Deacon of the Surgeons, he sat, during the crisis of the Reform Bill agitation, as one of the all-powerful thirty-three who swayed the destinies of Edinburgh in the old unreformed Town Council. He sat there, however, to make his influence felt on the side of Reform; and as the seconder of Lord Advocate Jeffrey for the representation of the city, stood among the champions of the popular cause on that memorable occasion when the misguided seventeen, who had thrown the people's petition over the table, were fain to consult their personal safety by sneaking out at the back door. To the principles so boldly avowed, at a time when such avowal might entail unpleasant consequences, Dr. Gairdner adhered to the last with unswerving constancy. He was invariably found the staunch friend of free thought, free speech, and free action, though always within the limits of strict reverence for law and just authority, and with a strong aversion for the "falsehood of extremes."

Dr. Gairdner's last medical paper, published in the *Edinburgh Medical Journal* in 1871, was the result of much investigation into the ravages caused by small-pox in the Royal families of Europe in the century before the discovery of vaccination. But until very lately he would surprise even his friends by communications on general topics to the press, and even higher subjects of a scientific or physiological character exercised his mental faculties to the last. Greek and Latin Dictionaries and Classics, and, above all, the Greek Testament, were at his bedside in daily use so long as he had strength to turn their pages. History was his favourite study, and even within the last ten years he has read not languidly, but critically, and, with a view to verify details and dates, such authors as Froude, Carlyle, Hill, Burton, &c., besides refreshing his memory of Gibbon, Tacitus, and other favourite authors. It is pleasant to contemplate a life so long, so liberal, so well sustained, and withal so creditable to the profession.

A MAN who died last week in Dublin from the effects of strychnine, stated that he had taken, in one dose, half an ounce of strychnine, one ounce of chloral, and two ounces of opium.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on Dec. 14th:—

Blamy, James, Penryn.
Grimbly, Richard Henry, Banbury.
Nickoll, John Sayer, Milton, Gravesend.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Bernard Faraby Giles and Alfred Pain, Guy's Hospital; Edward Sadler Warrillow and John Mordaunt Wheler, General Hospital, Birmingham; Henry Pearce, St. Mary's Hospital; George Henry Harvey, London Hospital; Alex. Stewart Ward Young, Bristol Hospital.

DR. FRANKLIN H. PARSONS has passed the examination in subjects relating to Public Health, at the University of London.

THE man Rogers, who a few weeks ago victimised several medical practitioners in London, has been sentenced at the Middlesex Sessions to four months' hard labour.

IN consequence of an outbreak of fever at Portadown, the Town Commissioners have determined to prosecute a number of landlords for not providing proper sanitary accommodation for their tenants.

DUBLIN PATHOLOGICAL SOCIETY.—The subject for competition this session is "On the Pathology of the Œsophagus." The prize, a gold medal, value £5, is awarded at the termination of the session, to the best essay sent in on the subject selected each year, and the competition is open to students attending the meetings of the Society.

BEQUESTS &C. TO MEDICAL CHARITIES. — Mr. George Westenholm, of Henwood-park, Sheffield, bequeathed £200 to the Sheffield General Infirmary, £200 to the Sheffield Dispensary, and £100 to the Sheffield Lying-in Hospital.—Mr. H. Mossop, of Warrington, has given £500 to the Peterborough Infirmary.

ST. STEPHEN'S GREEN, DUBLIN. — A Bill will shortly be introduced in Parliament for the purpose of placing the Green under Government management, and turning it into a public park for the use of the citizens. Considerable opposition was shown against the project, but all dissension is now at an end, and we congratulate the Commissioners, the Corporation of Dublin, and the citizens generally, on this happy termination of affairs.

Medical Appointments.

ARTHUR, H., M.D., C.M., has been appointed Medical Officer to the New Monkland Hospital and Poor-house, vice Torrance, deceased.

BENNETT, W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Chester Laurel Lodge of Odd Fellows, Chester-le-Street, vice Linton. Also to the Free Gardeners' Mutual Benefit Society, Chester-le-Street.

BINGHAM, Mr. S., has been appointed Medical Superintendent to the Hampstead Hospital, vice Mr. H. Case, appointed to the Metropolitan Asylum, Leavesden.

BLUETT, J., M.R.C.S.E., L.S.A.L., has been reappointed Medical Officer of Health for the Chesterfield Urban Sanitary District, at £100 per annum.

BOWKETT, W. D., M.R.C.S.E., L.S.A.L., has been appointed Resident Medical Officer to the Leeds Fever Hospital, vice Steell, resigned.

BROWN, Dr. J. C., has been appointed Public Analyst for Preston.

CALLAN, Dr., has been appointed Medical Officer, Public Vaccinator, &c., for the Castlebellingham Dispensary District of the Ardee Union, co. Louth, vice Trimble, resigned.

CAMPBELL, D., M.D., has been appointed Medical Officer of Health for the Caine Rural Sanitary District, vice Paul, resigned.

DALY, G. H., M.D., M.R.C.S.E., has been appointed Medical Officer to the Unity and Loyalty Lodge of Odd Fellows, Chippenham, vice Farrage, deceased.

DE BERNT, M. J., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Aveley District of the Orsett Union, Essex, vice Bott, resigned.

GAIRDNER, J., M.R.C.S.E., L.S.A., has been appointed Surgeon to the Inman Co.'s R.M.S. *City of Berlin*, vice Barnes, resigned.

GIBB, D., L.R.C.P.Ed., has been appointed Medical Officer of Health, Medical Attendant to the Police Force, and Medical Officer to the Fever Hospital, Airdrie, Lanarkshire, vice Torrance, deceased.

GRAY, T., L.R.C.S.E., has been appointed House Surgeon to the Isle of Man General Hospital, vice Woods, resigned.

HORNER, A. C., M.R.C.S.E., L.R.C.P., has been appointed Assistant Medical Officer and Dispenser to the Central London Sick Asylum District Asylum, Cleveland-street, vice Wattie, resigned.

HYATT, J. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of Health for the Shepton Mallet Urban Sanitary District.

JACOB, Dr., has been reappointed Medical Officer of Health for the Combined Sanitary Districts of Dorking, Epsom, Reigate, &c., at a salary of £300 a year.

LAWTON, H. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Third District of the Poole Union, vice Philpots.

MERWIN, A. G., M.D., has been appointed a Dental Surgeon to the Dental Hospital of London, vice Underwood, resigned.

MOSELEY, W. A., M.R.C.S., L.R.C.P., L.S.A., has been appointed a Supernumerary Surgeon in the Civil Service of British Guiana.

PERRY, G., M.R.C.S.E., L.K.Q.C.P.I., has been appointed Medical Officer and Public Vaccinator for No. 3 a District (the Parish of Heathfield) of the Hailsham Union, Sussex, vice Ellis, resigned.

ROBERTS, J. L., M.B., has been appointed Medical Officer of Health to the Ruthin Urban Sanitary Authority.

SMITH, R., M.A., M.B., C.M., has been appointed an Assistant Resident Medical Officer to the Leeds Public Dispensary, vice Granger, appointed House-Surgeon to the General Infirmary, Chester.

SPENCER, L. W., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed Medical Officer to the Windsor Castle Lodge of Odd Fellows, the Pleasant Retreat Lodge of Odd Fellows, and the Commercial Benefit Society, Preston, vice Monk, resigned.

THOMAS, W. R., M.D., late Lecturer on Practical Physiology, has been appointed Joint Lecturer on the Principles and Practice of Medicine at the Sheffield Medical School.

VENN, A., M.D., M.R.C.P., has been appointed Obstetric Physician to the Metropolitan Free Hospital.

WARNOCK, H. T., L.K.Q.C.P.I. & L.M., L.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Ballintra Dispensary District of the Ballyshannon Union, co. Donegal, vice Robinson, deceased.

WELHAM, R., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of Health for the Walton-on-the-Naze Urban Sanitary District, and Certifying Factory Surgeon, vice Grameshaw, resigned.

WHIPHAM, T. T., M.B., F.R.C.P.L., has been appointed a Physician to St. George's Hospital, vice Ogle, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CHETWOOD.—On the 17th inst., at King-street, Finsbury-square, the wife of William Chetwood, L.R.C.P.Ed., of a daughter.

DRAPER.—On the 12th inst., at York, the wife of William Draper, M.R.C.S.E., of a son.

FEAR.—On the 9th inst., at Brenchley, Kent, the wife of William Fear, M.R.C.S.E., of a son.

FOX.—On the 20th inst., at Hyde-road, Ardwick, Manchester, the wife of Dacre Fox, F.R.C.S.E., of a son.

GOODCHILD.—On the 7th inst., at Highgate-road, the wife of Nathaniel Goodchild, F.R.C.P.Ed., of a son.

GRAY.—On the 16th ult., at Cinnamara, Jorehaut, Upper Assam, the wife of Edward Gray, M.B., C.M., of a son.

JESSOP.—On the 17th inst., at Park-square, Leeds, the wife of T. R. Jessop, F.R.C.S.E., of a daughter.

KELLY.—On the 18th inst., at Slaney-place, Enniscorthy, the wife of Dr. Thos. J. Kelly, of a son.

LOGIE.—On the 10th inst., at Queensborough-terrace, Kensington-gardens, the wife of Surgeon-Major Logie, of a son.

MIDDLETON.—On the 11th inst., at Mullingar, the wife of William Henry Middleton, L.K.Q.C.P.I., of a son.

PARSONS.—On the 17th inst., at Kensington-park-road, the wife of Sidney Parsons, M.R.C.S.E., of a daughter.

WALSH.—On the 17th inst., at Fitzwilliam-square West, Dublin, the wife of Dr. A. J. Walsh, of a son.

MARRIAGES.

ANDERSON—MURRELL.—On the 26th October, at St. Andrew's Cathedral, Singapore, by the Rev. W. H. Gomes, A. F. Anderson, Esq., M.D., Colonial Surgeon, Singapore, to Selina Louisa, daughter of the late James Murrell, of Norfolk.

BAILEY—MARRIOTT.—On the 20th inst., at St. Luke's Church, South Kensington, by the Rev. H. F. Handcock, S. H. Bailey, M.B., of Nottingham, to Kate Ellen, eldest daughter of W. Marriott, Esq., of West Brompton.

BRENNAND—CULLING.—On the 18th inst., at West Lydford, near Somerton, Somerset, H. J. Brennand, M.B., C.M., to Leah, eldest daughter of the late Robert Culling, Esq., Surgeon.

DEATHS.

CARTWRIGHT.—On the 6th inst., at Allrighton, Cornelius Cartwright, Surgeon, aged 71.

CRESSWELL.—On the 18th inst., at South Norwood, Alfred Cresswell, L.R.C.P.Ed., aged 39.

FOREMAN.—On the 20th ult., at Standishgate, Wigan, William Foreman, M.D., aged 62.

HEWBY.—On the 1st October, at Melbourne, Australia, William Cooke Hewby, L.R.C.P.Ed., aged 34.

NEW.—On the 9th inst., at York-place, Marylebone, Oswald New, M.R.C.S.E., of Evesham, aged 60.

PRENTICE.—On the 15th inst., at Lowestoft, John Prentice, M.R.C.S.E., aged 61.

ROSSITER.—On the 30th inst., at Gainsborough, Daniel Rossiter, M.R.C.S.E., aged 48.

THOMPSON.—On the 16th inst., at Bray, Christopher Thompson, M.D., aged 62.

WEBB.—On the 15th inst., at Ironbridge, Salop, Matthew Webb, M.R.C.S.E., aged 63.

WEIR.—On the 13th inst., at Willowbank-crescent, Glasgow, William Weir, M.D., aged 82.

WILKIN.—On the 15th inst., at Blaney House, Enni Millen, James Wilkin, Surgeon, formerly Assistant-Surgeon in the Army.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

1877.

WE have much gratification in announcing that the following eminent members of the profession will contribute to the columns of THE LANCET in the course of the ensuing year:—

Sir WILLIAM JENNER.
Sir WILLIAM FERGUSSON.
Sir HENRY THOMPSON.
Dr. SAMUEL WILKS.
Dr. RUSSELL REYNOLDS.
Dr. BROWN-SÉQUARD.
Mr. JOHN MARSHALL.
Dr. HUMPHRY, Cambridge.
Dr. GRAINGER STEWART, Edinburgh.
Dr. GEORGE JOHNSON.
Dr. ROBERT BARNES.
Dr. BRAXTON HICKS.
Dr. CRICHTON BROWNE.
Dr. BASTIAN.
Dr. PAGET, Cambridge.
Mr. ERICHSEN.
Dr. RUTHERFORD, Edinburgh.
Mr. C. MACNAMARA.
Dr. TILBURY FOX.
Dr. MORELL MACKENZIE.
Dr. B. WOODMAN.
Mr. JOHN WOOD.
Dr. SIDNEY RINGER.
Dr. HUGHLINGS JACKSON.
Mr. BRUDENELL CARTER.
Dr. FERRIER.
Dr. HANDFIELD JONES.
Dr. H. DICKINSON.
Dr. BUZZARD.
Dr. GLOVER.
Dr. BRADBURY, Cambridge.
Dr. BROADBENT.
Dr. B. LIVEING.
Dr. FERGUS, Glasgow.
Dr. A. ROBERTSON, Edinburgh.
Mr. TWEEDY.
Mr. BULTEEL, Devonport.
Dr. GREENHALGH.
Dr. COUPLAND.
Dr. A. WILTSHIRE.
Dr. LEISHMAN, Glasgow.
Mr. BERKELEY HILL.
Dr. GOWERS.
Dr. E. H. BENNETT, Dublin.
Dr. FENWICK.
Dr. LAUDER BRUNTON.
Mr. H. POWER.
Dr. JOHN WILLIAMS.
Dr. RALFE.
Dr. E. B. BAXTER.
Dr. JAMES E. POLLOCK.
Mr. WM. S. SAVORY.
Mr. JOSEPH BELL, Edinburgh.
Dr. F. ROBERTS.
Mr. GEO. LAWSON.
Dr. SOUTHEY.
Mr. J. NUNNELEY, Leeds.
Dr. FRED. TAYLOR.
Dr. BALFOUR, Edinburgh.
Dr. CHURCH.
Dr. DAVIDSON, Liverpool.
Dr. CLEMENT LUCAS.
Dr. MORGAN, Manchester.
Dr. ALLCHIN.
Dr. MAJOR, Wakefield.
Dr. S. SMITH, Clifton.
Dr. LLOYD ROBERTS, Manchester.
Dr. GEORGE HARLEY.
Dr. WADHAM.
Dr. WOOD SMITH, Glasgow.
Mr. A. DURHAM.
Dr. MORTIMER GRANVILLE.
Mr. THOS. BRYANT.
Dr. HABERSHON.
Dr. MATTHEWS DUNCAN, Edinburgh.
Mr. JOHN CLAY, Birmingham.
Dr. DOWN.
Dr. WOODMAN, Worcester.
Mr. WAGSTAFFE.
Dr. CROLY, Dublin.
Dr. McCALL ANDERSON, Glasgow.
Dr. E. L. FOX, Clifton.
Mr. FRANCIS MASON.
Dr. EDIS.
Dr. MACNAMARA, Dublin.
Dr. McLEOD, Glasgow.
Mr. ANNANDALE, Edinburgh.
Mr. JOHN GAY.
Mr. R. HARRISON, Liverpool.
Mr. CHAS. HIGGENS.
Mr. MORRANT BAKER.
Dr. DAVY, Dublin.
Dr. SPENCER, Clifton.
Dr. JOHN CLELAND, Galway.
Dr. W. B. CHEADLE.
Dr. CHARTERIS, Glasgow.
Dr. GREENHOW.
Mr. WILDERS, Birmingham.
Dr. G. V. POORE.
Mr. CRITCHETT.
Dr. PHILIPSON, Newcastle.
Mr. HENRY SMITH.
Dr. ROBT. CORY.
Mr. F. JORDAN, Birmingham.
Mr. H. A. REEVES.
Mr. J. CROFT.
Mr. BRADLEY, Manchester.
Dr. CLIFFORD ALLBUTT, Leeds.
Dr. CURNOW.
Mr. SOLOMON, Birmingham.
Dr. POWELL.
Dr. W. HARVEY, Aberdeen.
Mr. T. HOLMES.
Mr. RANSOME, Bowdon.
Dr. SAVAGE.
Dr. GREENFIELD.
Mr. SYDNEY JONES.
Dr. STURGES.
Mr. R. PARKER, Liverpool.
Dr. RAYNER.
Dr. B. FOSTER, Birmingham.
Mr. T. SMITH.
Dr. BUCHANAN, Glasgow.
Dr. A. GALABIN.
Mr. WALTER RIVINGTON.
Mr. CULLINGWORTH, Manchester.
Dr. HALL, Brighton.
Mr. WEST, Birmingham.
Dr. E. B. SINCLAIR, Dublin.
Dr. W. PIRRIE, Aberdeen.
Dr. PAGE, Newcastle-on-Tyne.
Dr. RHYS WILLIAMS.

Notes, Short Comments, and Answers to Correspondents.

THEATRICALS AT EPSOM COLLEGE.

THE large party of visitors who assembled at Epsom College on Tuesday and Wednesday of last week were treated to a very pleasant entertainment. The preparation and acting of some one of Shakspeare's plays has become an annual custom at the College. It is found not only to afford some good practice in elocution to the boys, but to give a great deal of pleasure to young and old. On the present occasion "Much Ado about Nothing" was the play selected. The scenery and dresses were admirable, and the acting really excellent. Some of the boy-ladies were positively charming, and absolutely succeeded in not looking very awkward in their flowing robes. The more serious play was followed by the burlesque "Bluebeard." The music, songs, choruses, and all were composed for the occasion by one of the assistant-masters, the Rev. S. A. Rowton. The entertainment was pretty and varied, and was, of course, highly praised by the audience. Finally, a word of warm commendation ought to be said for those upon whom the real work of preparation chiefly fell—namely, the masters. Every one of them, not even omitting the head master, must have worked hard, and with a will, to ensure so decided a success.

Mr. W. H. Kesteven will see that the matter is noticed elsewhere.

ON EMPYEMA.

To the Editor of THE LANCET.

SIR,—In vol. ii. of THE LANCET for 1875 I published a case of empyema, which seemed to indicate the necessity for a free opening in empyema whenever an opening was to be made at all. During the last year the literature of empyema has been particularly rich in cases which point to a similar indication. We may, I believe, lay it down as conclusively proved that when an empyema is to be operated on, the utmost freedom of exit should be secured for the discharge. It is, perhaps, as yet an open question whether this is to be best secured by drainage-tubes or by the American method. Another question now arises, When ought an empyema to be operated on? It might be thought that this was not a moot point. It is not so, however; for some of the most eminent authorities take opposite views on this point. Some, like Dr. Flint, recommend that it should be treated like any abscess, and opened the first convenient moment after it is detected; others, like Dr. Walshe, hold that a trial should be given to internal remedies, and that until these have been proved to be powerless by the increase of the fluid, or by the quantity remaining stationary, no opening should be made.

I recently had a patient in my hospital, whose case would appear so entirely to favour the views of not trusting to anything save surgical interference as to suggest to me the advantage of its publication. He was a man, aged sixty, a labourer by calling. He was admitted on the 1st of August, 1876. His illness only dated from the 1st of July previous. He presented all the symptoms of fluid in the right pleura. There was some retraction of the right side of the chest, and in view of this evidence of a tendency towards a natural cure the question arose, Ought this tendency, aided by internal remedies, to be relied on, or ought surgical interference to be made? After some consideration I came to the conclusion that it would be safer to trust to surgical art. The man's general condition was at this time very fair; his appetite was good; and his pulse, temperature, &c., were little above par. I proposed, therefore, to the patient to make free openings into the purulent sac, after having first determined positively the exact character of the fluid with an aspirator-needle. This the man refused. The usual internal remedies, supplemented by external application of iodine, were now employed. Nature appeared to be resolved on working out a cure; for the chest went on falling in, and the sac, of course, became smaller as each week went on. The constitutional condition of the patient went in the inverse ratio of the local improvement. It was such as to leave no doubt of a fatal issue. There was some evidence, though not very clear evidence, of communication with the lung. A small quantity of purulent matter was expectorated daily. In the middle of October the patient himself proposed that I should open the chest. I declined, as it was only too evident that it was too late. The man lingered on until the 16th November, when he died. Asthenia was the most marked mode of death. This patient may be almost literally said to have died cured. More exactly, perhaps, might he be said to have died in the process of cure; the right pleura being only partially closed up, the chest measurements being fifteen inches in the right nipple line, and seventeen in the left. Here was a case where the *vis medicatrix naturæ* was actively at work, and where the apparent sacrifice of the general constitutional condition to the cure of the local disease points to her unreliability in such cases. There was here no increase of fluid. It did not remain even stationary. It was a case, therefore, in which the physician would be specially called on to invite no surgical interference. Nevertheless, tested by results, it but serves to lend additional force to the teaching of those who inculcate early surgical interference in empyema. There remains the additional question, How are we to determine whether the fluid in any given case be pus or not? The only accurate means which we have at present to determine this point is the exploring needle. It is happily as safe (despite a fatal case or two reported) as it is certain.

Yours &c.,

Union Hospital, Cashel, Dec. 12th, 1876. THOS. LAFFAN.

Mr. C. H. Basil.—There is reason to believe that vaccination by lymph taken from adult persons who have been previously vaccinated has not the same protective virtue against small-pox as vaccination by lymph taken from a primary vaccination. Persons so vaccinated get tolerably well-formed vesicles; but they have been found to get small-pox occasionally, which is the very rarest occurrence after revaccination with primary lymph.

Dr. Gordon (Dublin) is thanked for his letter and enclosure.

MOCK "LIE" TEA.

A WHOLESALE City tea merchant has called our attention to the introduction of some Indian tea in the English market, which is totally unfit for use. A sample of the tea has been submitted to our inspection, and though we have not had time to analyse the same, the perfume is that of mould rather than of tea. It is suspected, and with some show of reason, that this tea has been submerged through some accident, re-dried, and forwarded on to London as if nothing had happened. The trade fortunately at first hesitated to buy these damaged leaves; but we are not at all sure that some less discerning purchaser may not be forthcoming. This is a matter of more than passing interest. In 1863 we imported from India tea to the value of £2,500,000 sterling. In three years this trade had doubled, and in 1875 it had reached the immense figure of £25,500,000; while the the total importation for the present year will amount to some £28,000,000. These figures forcibly demonstrate the rapid increase and the immense importance of this trade. We evidently possess an incalculable source of wealth in the cultivation of Indian tea, and the nation has, therefore, a right to interest itself in the reputation of a produce which promises to be the source of great national prosperity. There is no knowing, however, what harm may be done to these fair prospects if, through the carelessness of our dockyard inspectors or the unscrupulous dealings of certain merchants, the reputation of Indian tea is sacrificed by the sale of a damaged cargo. It is easy to give a new article a bad name.

Dr. H.—They are appointed by the chief inspectors under the Factory Acts.

THE ACTION OF ERGOT IN TEDIOUS LABOUR.

To the Editor of THE LANCET.

SIR,—In answer to the question of your correspondent, "L.R.C.P.," I would suggest that the failure of ergot in his hands is most probably due to the use of one or other of its very untrustworthy liquid preparations. I never use them; but carry in my obstetrical bag a wide-mouthed bottle, which will contain four drachms (approximately) of coarsely-powdered secale, and, after the usual preliminaries, I make it my first business to have an infusion made of one drachm of it in a cupful of boiling water. I may add that it is often necessary to see for oneself that the water is really boiling, or the result may be far from satisfactory. Should the use of ergot be indicated during labour, I give it, and with uniformly good results; but, if not, a part or the whole of the draught is given before the removal of the placenta, to ensure—with the important aid of firm bandaging, which I invariably use from the moment that the pains become expulsive—the firm contraction of the uterus.

As another point of practice, I would strongly recommend the use of a somewhat neglected form of forceps—Assilini's,—the most easily applied, locked or shifted, I am acquainted with, and which can be used with the least amount of fuss; in fact, I have several times introduced the blades without the knowledge of the patient. And I do not know any other form of this invaluable instrument with which one can feel the exact position of the head so perfectly, and with which that happy "shake" which so often dislodges an impacted cranium can be so readily performed, and at the same time is so efficient both for compression and traction.

I am, Sir, yours obediently,

The Elms, Ixworth, December, 1876. G. F. M.

To the Editor of THE LANCET.

SIR,—Perhaps an explanation of the disappointment of "L.R.C.P." in regard to the effects of ergot, will be found in the preparation which he uses. I have tried a great many "liquors" and "extracts" of ergot both in Scotland and London, and my experience is that they are nearly all inert. If, however, your correspondent will use the *fresh* powder, infused in *boiling* water for a quarter of an hour, as occasion requires, I think he will then subscribe to your dictum, that the power of ergot over the uterus is "one of the best established facts in therapeutics." Yours &c.,

London, Dec. 16th, 1876. J. B.

Nemo, (Lasswade, near Edinburgh.)—We have perused the copy of the memorial forwarded us; but so many points are embodied in the eight closely-printed pages that we are not sure we fully understand the case, which is very difficult of comprehension by anyone not a member of the service, and intimately acquainted with its rules and regulations. It seems to us, however, that our correspondent suffers from the operation of a rule introduced after he entered the service—that of compulsory retirement at fifty-five. Had he not retired when he did, he would have reaped the benefit of the annuity, to which he was compelled to subscribe for two years. Our correspondent's case seems to be a hard one; and if he is legally considered to have no claim, he has certainly made out one for special consideration as an act of grace.

Mr. A. Aubrey Husband.—The work is published by Lindsay and Blakiston, Philadelphia.

J. M. F.—The qualification in question is a surgical one.

TREATMENT OF GOUT.

To the Editor of THE LANCET.

SIR,—I do not know whether the following plan has ever been tried or recommended for warding off a paroxysm of gout in the foot. I have at all events never seen it suggested. In five or six cases I have tried the use of an elastic stocking when the first uneasiness and swelling of the superficial veins has been perceived, and invariably with the result of preventing the development of the full attack in the foot. There is no theoretical reason that I can see why it should not succeed as well as the abortive treatment in local inflammation (as in boils) by astringents, caustic, collodion, &c. Of course it does not do away with the necessity for constitutional treatment and diet; but if it stops the full development of the attack in a busy man, and thus prevents him being laid up, it is a great boon.

I remain, Sir, yours truly,

Wandsworth, December, 1876. H. B. WINTER, M.R.C.S.

VACCINATION IN INDIA.

It would appear from an official Report of the Indian Government that in the important State of Rajpootana vaccination is not carried out so thoroughly as could be desired. Last year the percentage of successful vaccinations to births was only 23. This compares very unfavourably with the returns from the Central Provinces, where the rate is 57·63. Provision for carrying out the measure is evidently insufficient, as, with an estimated population of 10,000,000 in Rajpootana, there is but one vaccinator to every 125,000 persons. There does not appear to be any deep antipathy against the operation felt by the people; therefore we may hope that, by a little more expenditure and a closer supervision, a considerable improvement will be effected. The yearly diminishing mortality from small-pox in consequence of the protection afforded by vaccination is continually forced on the attention of the native communities, most of whom are now thoroughly appreciative of the blessing conferred upon them, and desirous of assisting the authorities in their endeavours to stamp out what was once a never-absent pest of the country.

Melitensis.—1. There is no doubt that two acute specific diseases may co-exist.—2. Try the late Sir Ranald Martin's publications.

Professor Macleod (Glasgow) is thanked.

METHOD OF CARRYING URINE TESTS AND STRONG DRUGS.

To the Editor of THE LANCET.

SIR,—Your correspondent of Dec. 16th, Mr. W. H. Kesteven, wishes to know a handy method of carrying small quantities of nitric acid about in order to perform his very neat test for albumen.

I have found it a very convenient method of carrying about small quantities of reagents, &c., to seal them up in capillary tubes, rather larger and stronger than those used to carry vaccine lymph. They are easily charged with the test, and then sealed in the usual manner by fusing each end in a flame. With nitric acid and volatile reagents it is necessary to allow half an inch or so of clear space at each end. Two or three drops of nitric acid—enough for one testing—can readily be enclosed. The most satisfactory test for applying in these fine tubes is the one for ascertaining the presence of chlorides, which it is often useful to apply in doubtful cases of inflammatory effusion, &c. A capillary tube three or four inches long is half filled with a solution of two scruples of nitrate of silver in one ounce of nitric acid, and the ends sealed by fusion. When required, these ends are broken off and the liquid brought down to one end of the tube. The surface of the urine to be tested is touched for a moment with this end, when there is an immediate interchange of liquids by gravity (if kept too long in contact with urine, all the test will flow out and urine take its place), and the small tube then held against one's coat-sleeve or any black surface shows the curdy precipitate of chloride of silver very plainly, if any chlorides be present in the specimen. The precipitate of albumen, effected by plain nitric acid in a similar way, is scarcely visible enough, unless the albumen be in large quantity; but the acid can readily be so carried and used in the way Mr. Kesteven mentions. Other reagents and some drugs can also be carried in small tubes in a similar manner, and an ordinary short test-tube, closed by a cork, will hold a selection which can be carried in the waistcoat pocket. To distinguish the tests, I have tried, but hitherto without success, to get glass tubing of different colours, which could be drawn out, in a gas flame, into the required small tubes, when a known colour would indicate the contents without any label being affixed. Nitrite of amyl, of which four or five drops can be easily shut up in a fine tube, is often wanted in a hurry in cases of asthma or syncope from chloroform inhalation; in the former case, the required dose can be left in charge of the patient, or a stock carried by the doctor. Strong solution of ammonia, coloured by carmine to distinguish it, can be carried for use in cases of asphyxia; and many other applications of the same handy method can be suggested.

In reply to your correspondent, "W. E. P.," I think he will find the coloured stains he mentions to be speedily removed by the following ointment:—Iodide of sulphur, eight grains; ammonio-chloride of mercury, acetate of lead, of each twenty grains; lard, one ounce. To be rubbed in twice a day till slightly sore, when it may be stopped, and the desquamation which will ensue will probably at once remove the marks complained of. I believe the iodide of sulphur is the active ingredient in it; but the above ointment, or one slightly weaker, is what I have used to remove similar marks. The iodide of sulphur is very easily made (see Beasley's Formulary).

I am, Sir, yours faithfully,

Tynemouth, Dec. 18th, 1876. ROBERT S. PEART, M.D., &c.

To the Editor of THE LANCET.

SIR,—The latter part of Mr. Kesteven's letter in last week's LANCET reminds me of a plan I read of somewhere a few years ago for carrying about nitric acid for testing albumen at the bedside in practice. All that is required are a small test-tube, some capillary tubes, and a slight glass rod, which latter can be carried in the test-tube. The nitric acid is stored in the capillary tubes, hermetically sealed, in the same way that vaccine is. When testing for albumen, urine is poured into the test-tube, a tube filled with nitric acid dropped into it, and then broken by means of the glass rod. Could not nitrite of amyl be stored up in the same way, in definite quantities, for use at the bedside on emergencies?—Yours &c.,

Cardiff, Dec. 19th, 1876. A. SHERN, M.D.

To the Editor of THE LANCET.

SIR,—Would you allow me to say to Mr. W. H. Kesteven that I have been in the habit of carrying pure nitric acid in ordinary vaccine tubes for the last ten years. The method of filling the tubes is just the same as charging them with lymph, and of course one can put them either in a phial or in a test-tube. I am, Sir, faithfully yours,

Shotts, N.B., Dec. 1876. J. CALDWELL.

J. H. N.—Nothing reliable has yet been written on the subject. It is a mode of treatment which must be considered still upon its trial, and of doubtful efficiency.

Dr. Carr (Blackheath) is thanked. We, however, had already something in type on the subject.

Marion Bertram.—We intend shortly to deal with the matter.

AGED PAUPERS' BREAD.

PRESUMABLY bread for aged paupers ought to be soft. This is not, it would seem, a postulate in the philosophy of every board of guardians. There are some with whom the notion that a pauper's fare should be hard extends to the matter of bread, regardless of the matter of age. We hear of a loaf so hard that "the poor old souls between seventy and eighty cannot get their teeth into it." At one period of naval history the sturdy British mariner, withal wearing His Majesty's uniform, had junk so rock-like that it must needs be excavated or split, and biscuits of the toughest, out of which the weevils must be knocked before it could be eaten. We have no sentiment of maudlin sympathy for the lazy parasites who can work, but prefer to be idle. The case of the aged poor is, however, quite different, and for them, we say, provide a more edible and wholesome commodity, or it may be needful to "name" peccant guardians who so unfeelingly feed their poor folk, and wring from them repinings in place of gratitude, and cursings for blessings.

Hibernian should write to the Secretaries of the respective corporations he names.

Mr. A. Wynter Blyth.—Try Williams and Norgate.

SERVICE IN THE TURKISH ARMY.

To the Editor of THE LANCET.

SIR,—Last August some twenty gentlemen accepted appointments in the Turkish service as surgeons, with the honorary rank of colonel "aghasi," or major. The Ottoman Government allowed an amply sufficient sum for travelling expenses, and in due time most of those who had accepted and signed the contract tendered them by the Turkish Ambassador in London found themselves in Constantinople.

After a most unpleasant fortnight waiting for orders, we were all despatched to our various destinations, some to Novi Bazaar, some to Widin on the Danube, some to Nish, and one to Larissa in Thessaly.

Of those who were sent to Nish, the majority were originally attached to battalions, while a few were destined for the military hospital. All alike, however, were detained at Nish, and, instead of going immediately to the front, were told off to hospital duty. A ward containing some forty beds has been placed at the disposal of each Englishman, who has full control over its management, being responsible only to the Director-General. So far the arrangement has worked exceedingly well, and here at least the authorities have expressed themselves satisfied with the work done.

As it is possible, and indeed in the event of war almost certain, that the Turkish Government will invite more English surgeons to join its army, a few remarks on the advantages and disadvantages of the position may be made. In the first place, no one ought to come out here without a fair knowledge of at least one modern language, which should be by preference French. Without this he is placed, as regards himself, in a most awkward position, and, moreover, so far as working with his colleagues is concerned, is practically useless. Every medical man here speaks French, while not one in a hundred speaks English. In the second place, he should have some private means. To come out, as some men have done lately, without a shilling in their pockets is simply ridiculous, and, moreover, at once lowers them in the eyes of their Turkish brethren. There is no country in the world where appearances are of more importance than in Turkey, or where a man's manner, dress, and bearing more bespeak his rank.

The advantages of the service are, in peace, an easy, uneventful life, with a good deal of the *dolce far niente* about it; with payments always in arrear, but in the end certain, and with food cheap and plentiful. The disadvantages are that there is no society of any kind, few chances of promotion, and still fewer of making an independence. Should a man have a friend at court, his success is assured without much trouble on his own part. Should he not, he will find his best efforts go unrewarded. There is, however, perhaps no service in the world where a man is so much his own master and so practically independent. There are many men who are inclined to think that fifty years in Europe are not better than a cycle in Cathay, and such men, if they are tired of English drudgery, have any knowledge of language, and a few hundred pounds in their pockets, could not do better than come out here.

Yours &c.,
Nish, Bulgaria, Nov. 28th, 1876. LITTON FORBES, M.D.

THE CROYDON SCHOOL OF ART.

DR. RICHARDSON distributed the prizes at the Croydon School of Art on Tuesday, the 12th inst., and in the course of an eloquent address pointed some judicious and useful hints to students. One of the lessons he inculcated with especial appropriateness was the wisdom of avoiding an undue effort. "To strain for effect" is an error of policy in work of any kind. Extreme exertion is, however, the besetting weakness of the day. It is strictly true that the best work in all departments has been that which has been accomplished with the least effort. The precept of moderation was worth enforcing.

Probe.—The injection is certainly worth trying.

SYPHILITIC COPPER-COLOURED STAINS.

To the Editor of THE LANCET.

SIR,—In answer to "W. E. P.'s" inquiry in your last issue for a remedy to remove the copper-coloured stains of a syphilitic rash, I would recommend the administration of the solution of arsenic and of iodide of mercury, or Donovan's solution, in ten-minim doses three times a day after meals. This I have found very certain in effect after the failure of treatment mentioned in your correspondent's letter.

Yours obediently,
RICHARD CRESSWELL, M.R.C.S.,
Late Resident Surgeon, Lock Hospital.
Cannon-street, E.C., Dec. 18th, 1876.

ANÆSTHESIA IN THE LOWER ANIMALS.

PROFESSOR WALLEY, in his introductory address at the opening of the Veterinary College, Edinburgh, referring to the evidence of a witness before the Royal Commission on Vivisection, to the effect that the circulation of the dog is intermittent, and that therefore chloroform cannot ordinarily be employed in the performance of operations on that animal, said that both those statements are misleading. The circulation of the dog, he maintained, is no more intermittent than that of any other animal. For years he had been in the habit of administering chloroform to the dog, and had never had a mishap; he had met with but two animals which had resisted its action, and one of these did so only partially.

Dr. Gimson, (Witham.)—We did not intend that our article of the 9th inst. should, nor does it appear to us that it does, contain any remark unfavourable to our correspondent.

SEWERAGE OF UPPINGHAM.

To the Editor of THE LANCET.

SIR,—In April last I was elected a guardian for Uppingham, and was by the guardians put on the Sanitary Committee, and until lately I was under the impression that the union house was connected with the sewerage system of the town for *all* purposes. Towards the end of last month I was asked by some ratepayers to inquire whether my impression was correct, or whether there were not some cesspits on the premises. I did so, and, to my surprise, the master, when summoned, told the Chairman and myself that there were seven or eight cesspits in different parts of the union grounds.

At the next meeting, Wednesday, Dec. 13th, I brought the matter before the sanitary authority, and proposed that the question of abolishing the cesspits should be brought before the next meeting of the whole Board. The Chairman opposed it, and said he did not see why the union should be put to the expense; or, if they did abolish them, it might stand over for a time, as they were not legally bound to get rid of them. I pointed out that it was desirable to be rid of them as soon as possible, and that, as the expense would fall on the whole union, it would be very slight divided among thirty-three parishes, and trusted the authority would not quibble about the legal liability; and further, if we expect by our new bye-laws to abolish cesspits in the town, we ought to set the example and rid our own premises of them.

I hope a memorial will be before us at our next meeting, as I have failed; and if you can put in a short statement of the matter, taken from the facts I have given, you will greatly help our efforts to bring these guardians to see the impropriety of their conduct.

Yours sincerely,
Uppingham, Rutland, Dec. 16th, 1876. A. M. Y.

A Public Vaccinator.—We scarcely agree with our correspondent. He should remember that he has a monopoly of vaccinations. It is a small return that he should be ready to give supplies of lymph to professional brethren, many of whose patients he vaccinates.

Mr. Douglas Hemming.—Soon.

ETHER INHALERS.

To the Editor of THE LANCET.

SIR,—The ether inhaler described by Mr. Angove in your last impression resembles a part of my apparatus for giving gas and ether, separately or combined. His apparatus consists of a face-piece, a tube leading from it to the ether vessel, and a bag to receive the expired air after it has passed through the ether vessel. My apparatus has the same arrangement, but is provided with a stop-cock, which causes the whole or part of the expired air to enter the bag at the proximal end, without going through the ether vessel, and it regulates the strength of the ether vapour so accurately that patients rarely manifest any discomfort from the pungency of the vapour. In my apparatus the ether vessel is arranged to hold six ounces of ether besides eight ounces of water in a separate compartment, the effect of such arrangement being that the temperature of the ether does not fall more than five degrees in an ordinary inhalation, and the addition of ether during a long operation is unnecessary.

Since I wrote my paper I continue to have satisfactory results from the use of the instrument. Those for whose practice the complete apparatus is too bulky or too costly may be interested to know that Mayer and Meltzer have made some alterations in it with a view to economy and portability.

Yours faithfully,
Cavendish-place, Dec. 18th, 1876. J. T. CLOVER.

G. R. B., (Halifax.)—We do not recommend the adoption of the plan suggested.

O. F. M.—At the instance of the recipients.

OFFICERS OF HEALTH AND PRIVATE PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—In your excellent article on the Relations between Medical Officers of Health and Private Practitioners in your last number, there is one point I think you might have mentioned with advantage. This is, that the medical officer of health should always possess a certificate of qualification for his post from some constituted examining body. At present there are Cambridge, Dublin, and London Universities. You must be aware how often the post is given for party considerations to men well known to be totally unqualified for this kind of work; and who can deny that special knowledge is required for the proper performance of its duties, and the consequent confusion and distrust in matters of sanitary work in the minds of the public at large? This must be wrong, and medical practitioners would in most instances be unwilling to put themselves in the position you advocate with medical officers of health unless these latter were properly qualified by an examining body.

Yours &c.,
Dec. 1876. ESSEX.

CHOLERA IN INDIA.

IN spite of all precautions taken by the authorities, cholera broke out some time past among the troops at Peshawur. In a short period there were 29 admissions and 16 deaths among the European soldiers of the garrison, and 15 cases and 7 deaths among the native troops. The mortality amongst the native population could not be ascertained. The horse artillery suffered severely, losing 11 out of 13 men attacked. The troops are now scattered over the district. The forethought of Brigadier-General Ross in taking comprehensive preventive measures is praised. In addition to cholera, what is termed "Peshawur fever" is rife, and has crippled half the men of the 14th Sikh Regiment.

BEQUESTS TO MEDICAL CHARITIES.

To the Editor of THE LANCET.

SIR,—I see in your impression of last week an intimation that the family of the late A. B. Cochrane, Esq., has given £2350 to the Guest Hospital at Dudley. I have pleasure in stating that the total sum given to charitable institutions by that family is £4700; the remaining £2350 has been given to the Middlesborough Cottage Hospital, and is being expended in building a new wing, to be named the Alexander Brodie Cochrane Wing.

Yours sincerely,

Middlesborough, Dec. 19th, 1876. W. Y. VEITCH.

Chemicus.—We believe Dr. Fleitmann some time ago called attention to the fact that filtration is more rapid through thick paper than through thin, and that it is almost twice as rapid through a double filter as through a single one. He stated that he had for years employed, in quantitative analyses, a filter of heavy paper in preference to the thin one of Swedish manufacture.

F. Z. S.—MM. Mathieu and Urbain's experiments on the cause of the coagulation of the blood, which appeared to controvert the results of those of M. Gléman, were noticed in THE LANCET of Feb. 26th of the present year, to which our correspondent would do well to refer.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir H. Thompson, London; Prof. Humphry, Cambridge; Dr. Rutherford, Edinburgh; Dr. Russell Reynolds, London; Dr. R. Barnes, London; Dr. Donkin, London; Dr. Liveing, London; Mr. Clover, London; Mr. W. B. Dalby, London; Dr. Crichton Browne; Dr. Fleming, Glasgow; Dr. Edis, London; Dr. Acland, Oxford; Dr. Bartolomé, Sheffield; Dr. A. Harvey, Aberdeen; Dr. W. R. Williams, London; Dr. W. Pirrie, Aberdeen; Mr. Page, Newcastle-on-Tyne; Dr. Sheelan, Dublin; Mr. Weston, London; Mr. Veitch, Middlesborough; Dr. Gairdner, Glasgow; Dr. Rayne, Eccles; Mr. Osler, Montreal; Mr. Peirce, Denbigh; Dr. O. Drewry, London; Mr. Hemming, London; Dr. Blyth, Barnstaple; Dr. H. Tibbits, London; Mr. Cooper, Bolton; Messrs. Cadbury Bros., Birmingham; Mr. J. West, Birmingham; Dr. Macleod, Glasgow; Dr. Galabin, London; Dr. Hall, Brighton; Mr. W. H. Kesteven; Mr. Coleman, Birmingham; Mr. Carey, Canning-town; Dr. Seaton, Sunbury; Mr. Gordon, Dublin; Dr. Sinclair, Dublin; Mr. J. Green, London; Dr. Steele, Liverpool; Mr. Forster, Market Deeping; Mr. Warrington, Rutherglen; Mr. Caldwell, Shotts, N.B.; Mr. Phelps, Freshwater; Dr. Peart, Tynemouth; Mr. Cresswell, London; Dr. Neale, St. John's-wood; Mr. Roberts, Bradford; Dr. Sawyer, Birmingham; Mr. Roberts, London; Dr. Mackenna, London; Mr. H. Davy, London; Mr. Wynter, Wandsworth; Mr. Mosely, London; Mr. Bertram, Clapham; Mr. Cullingworth, Manchester; Mr. M. W. Robertson, London; Dr. Thomas, Sheffield; Mr. H. Larkin, London; Mr. Lyle, Exeter; Mr. Thisdon, London; Dr. Thursfield, London; Dr. Whittell, California; Mr. Thompson, South Kensington; Mr. Hillson; Mr. R. Greene; Mr. Wharton; Dr. Marshall; Mr. Eaton; Dr. Sheen, Cardiff; Dr. Fisher, Bideford; Mr. Morris; Mr. Croxton; Dr. Young, Florence; Mr. Cross; Dr. Bennett, Chester-le-Street; Dr. Reed, Scutari; Dr. Bingham, Hampstead; Dr. Wilson, Worcester; The Registrar-General of Edinburgh; A Public Vaccinator; Scalpel; A. M. Y.; A. B.; Operator; G. P. M.; Essex; P. P.; Probe; H. M. W.; D. H.; Nemo; M.D.; P. A., Eaton; B. A., Barnsbury; M.R.C.S.; L.R.C.P. Lond.; C. R. L.; J. M. F.; M.D.; J. H. N.; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Hunter, Aberdeen; Mr. Murray, Cork; Mr. Brown, Ventnor; Mr. Anderson, Glasgow; Mr. Fothergill, Darlington; Mr. Sharp, Cullen; Mr. McNab, Stirling; Mr. Eastwood, Darlington; Dr. Blakeney, Boyle; Mr. Sewell; Mr. White; Mr. Watson; Mr. Sinclair; Mr. Warren; Dr. Kelly, Enniscorthy; Mr. Crow, Hartlepool; Mr. Arnison; Dr. Morgan; Mr. Milne; Mr. Thomas; Dr. Farrow, Lincoln; A. T., Southend; U. C. H., Stoke; Medicus, Higham Ferrers; J. S., Derby; Alpha, Aberdeen; M. D., Newcastle; T. P. W.; Medicus, Cambridge; G. M., Wingham; Unqualified; M.D., Plymouth; Medicus, Brixton; M.D., St. Ives; J. G.; M. P. S.; Medical, Bow; M. P. S.; A. Z., Amersham; S. P. R.; X. Z., Deal; B. B.; Chirurgus, Liverpool; G. P. O.

Newcastle Chronicle, Welshman, Schoolmaster, Walthamstow Chronicle, Western Morning News, Scotsman, Hand and Heart, Surrey Advertiser, Carnarvon Herald, Heaton Herald, Liverpool Post, Greenock Telegraph, Tunbridge Wells Gazette, North British Daily Mail, Hampshire Post, Manchester Guardian, East London Observer, Derbyshire Times, Calne Chronicle, Sheffield and Rotherham Independent, Record, Porcupine, Reporter, Mayfair, Middlesborough Daily Gazette, Glasgow Citizen, and *Manchester and Salisbury Chronicle* have been received.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

[THE LANCET OFFICE, DEC. 21st, 1876.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Dec. 15	29·94	S.E.	42	43	...	46	41	...	Foggy
„ 16	29·84	S.E.	42	43	...	45	40	...	Overcast
„ 17	29·74	S.E.	43	44	...	46	41	0·12	Overcast
„ 18	29·27	E.	42	43	...	47	40	0·28	Raining
„ 19	29·18	N.W.	42	43	...	48	41	0·11	Foggy
„ 20	28·79	S.	43	43	...	46	42	0·28	Raining
„ 21	28·80	S.E.	40	41	...	...	40	0·36	Overcast

Medical Diary for the ensuing Week.

Monday, Dec. 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

Tuesday, Dec. 26.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, Dec. 27.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.

Thursday, Dec. 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, Dec. 29.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

Saturday, Dec. 30.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NOTICE.

In consequence of THE LANCET being frequently detained by the Post Office when posted for places abroad *more than eight days after* publication, subscribers and others are reminded that such copies can be forwarded only as book packets, and *prepaid* as such.

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